

ANNUAL REPORT

OF THE

DEPARTMENT OF THE INTERIOR

FOR THE FISCAL PERIOD FROM

JULY 1, 1906. to MARCH 31, 1907

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

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EXCELLENT MAJESTY

1907

[No. 25—1908.]

*To His Excellency the Right Honourable Sir Albert Henry George, Earl Grey,
G.C.M.G., &c., &c., Governor General of Canada.*

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the Report of the transactions of the Department of the Interior for the fiscal period ending March 31, 1907.

Respectfully submitted,

FRANK OLIVER,

Minister of the Interior.

OTTAWA, August 10, 1907.

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REPORT

OF THE

DEPUTY MINISTER OF THE INTERIOR

1906-7

DEPARTMENT OF THE INTERIOR,

OTTAWA, July 15, 1907.

The Honourable FRANK OLIVER,
Minister of the Interior.

SIR,—I have the honour to submit the annual report of the Department of the Interior for the nine months of the fiscal year ending March 31, 1907. The provision which was made some time ago changing the date of the commencement of the fiscal year from July 1 to April 1, has made it necessary that a corresponding change should be made in the various statements of immigrant arrivals and of lands disposed of, so that the results of the work shown in the report have reference to nine months only, or three-quarters of the year, as compared with the previous fiscal period 1905-6.

As will be observed from the returns submitted, the general results obtained, both from a financial standpoint and as regards the opening up and settlement of the vacant lands of the western provinces, have been highly satisfactory. Briefly, these results may be summarized as follows: Total revenue, \$2,278,548.21, or a net increase of \$753,333.28 as compared with the corresponding previous nine months; immigrant arrivals, 124,667, and free homestead entries, 21,647. It may be added that the immigrant arrivals during the twelve months ending June 30, last, reached the quarter million mark, as compared with 189,064 during the previous year ending June 30, 1906.

In order to expedite the issue of the general report, it has been found necessary again this year to publish the reports of the Surveyor General, except the introductory portion, and of the Chief Astronomer as supplementaries, and they will, therefore, appear in monograph form. While this arrangement permits of the general report being issued at an earlier date than could otherwise be done, it offers another advantage, inasmuch as the demand for the two reports referred to, which are chiefly of a technical nature, is made by persons who are not, as a rule, particularly interested in the other matters dealt with in the general report, and the issue, therefore, of these reports in monograph form would appear to be advisable, both as a matter of convenience and economy.

NEW APPOINTMENTS.

Mr. Elihu Stewart, who was appointed Superintendent of Forestry on August 15, 1899, resigned that position on March 1, 1907, in order to engage in outside private business. Mr. Stewart had been connected with the Forestry Branch since its inception, and much of the success which has been achieved by the department in the matter of tree planting and forest protection has been due to the zeal and ability which he displayed during his tenure of office. It was largely due to his efforts also that the Dominion Forestry Association, the annual meetings of which in different parts of Canada have been conducive to such satisfactory results, was organized and established on a permanent basis a few years ago.

Mr. R. H. Campbell, who for some time previously had held the position of chief clerk in charge of the Timber Branch, was appointed to succeed Mr. Stewart as Superintendent of Forestry on March 1, 1907. Mr. Campbell is well qualified to perform the duties of this important position, as the special study that he has made of the forest resources of the western provinces, coupled with the experience which he has acquired in timber matters in his capacity as secretary of the Dominion Forestry Association, has enabled him to gain a thorough knowledge of the work.

Mr. B. L. York, who has been a permanent officer of the department since the year 1885, was appointed to the position of chief clerk in charge of the Timber Branch on March 1, 1907.

Mr. J. M. Roberts was promoted to a chief clerkship and placed in charge of the Registration Branch on April 1, 1907, in the place of Mr. K. J. Henry, who, on account of ill-health was compelled to ask for leave of absence, and who has since been assigned to less onerous duties in another branch of the department.

DEATHS.

I regret to have to report two deaths in the inside service during the past year, namely, that of Mr. William F. Boardman, which occurred on January 5, 1907, and that of Mr. H. C. Coones on April 27, last.

STATEMENT showing Gross Cash Revenue received from all sources during the Fiscal Period ended March 31, 1907, compared with the receipts of the corresponding period of the previous fiscal year.

Revenue.	July 1, 1906, to March 31, 1907. Nine months.	July 1, 1905, to March 31, 1906. Nine months.	Increase.	Decrease.	Net increase.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dominion lands.	1,478,749 51	1,054,371 71	424,377 80	.....	.....
School lands.	724,353 73	327,914 18	396,439 55	.....	.....
Ordnance lands.	6,663 90	8,340 48	.....	1,676 58	.....
Registration fees.	46,124 20	119,027 46	.....	72,903 26	.....
Fines and forfeitures, N.W.T.	21 00	3,304 77	.....	3,283 77	.....
Fines under Immigration Act.	2,875 00	.....	2,875 00	.....	.....
Casual revenue.	8,910 81	3,845 33	5,065 48	.....	.....
Seed grain.	10,850 06	8,411 00	2,439 06
	2,278,548 21	1,525,214 93	831,196 89	77,863 61	753,333 28

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DOMINION Lands Revenue (cash and scrip) for the Fiscal Period ended March 31, 1907.

Agencies, &c.	Cash.	Scrip.	Total.
<i>Yukon Territory.</i>	\$ cts.	\$ cts.	\$ cts.
Sales of land.....	6,773 39		
Rental of land.....	1,943 92		
Map sales, office fees, &c.....	42 50		
Survey fees.....	100 00		
Timber dues.....	15,732 58		
Hay permits.....	105 00		
Mining fees.....	102,334 25		
Export tax on gold.....	82,622 42		
Free certificate for export on gold.....	215 50		
Free miner's certificates.....	13,309 75		
Hydraulic leases.....	3,345 88		
Dredging leases.....	1,960 00		
Coal lands.....	517 34		
Rent of water-power.....	500 00		
Suspense accounts.....	588 00		
	230,090 53		230,090 53
<i>Dominion Lands Agencies.</i>			
Alameda.....	22,959 13		22,959 13
Battleford.....	46,563 47	1,120 00	47,683 47
Brandon.....	6,732 92		6,732 92
Calgary.....	68,341 38	1,200 00	69,541 38
Dauphin.....	9,138 50		9,138 50
Edmonton.....	79,689 57	149 62	79,839 19
Humboldt (5 months).....	9,110 74	134 25	9,244 99
Kamloops.....	7,827 62		7,827 62
Lethbridge.....	294,565 66	2,939 46	297,505 12
Minnedosa (3 months closed).....	1,032 61		1,032 61
Moose-jaw (1 month).....	610 25		610 25
New Westminster.....	6,587 84		6,587 84
Prince Albert.....	14,647 52	1,080 29	15,727 81
Red Deer.....	29,649 63	1,106 67	30,755 30
Regina.....	98,793 96	2,179 60	100,973 56
Winnipeg.....	20,098 63	1,440 00	21,538 63
Yorkton.....	27,404 08		27,404 08
	743,753 51	11,349 89	755,103 40
Carried forward.....	973,844 04	11,349 89	985,193 93

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DOMINION LANDS REVENUE.

DOMINION Lands Revenue (cash and scrip) for the Fiscal Period ended March 31,
1907—Continued.

Agencies, &c.	Cash.	Scrip.	Total.
	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	973,844 04	11,349 89	985,193 93
<i>Crown Timber Agencies.</i>			
Alameda.....	3 00		
Battleford.....	56 75		
Brandon.....	92 15		
Calgary.....	15,094 91		
Dauphin.....	5,699 95		
Edmonton.....	89,046 08		
Humboldt (5 months).....	32 75		
Lethbridge.....	811 18		
Minnedosa (3 months closed).....	1,503 51		
Moosejaw (1 month).....	25		
New Westminster.....	185,168 80		
Prince Albert.....	24,677 73		
Red Deer.....	393 06		
Regina.....	267 51		
Winnipeg.....	89,515 61		
Yorkton.....	1,380 50		
	363,743 74		363,743 74
Rocky Mountains Park.....	15,883 51	3 91	15,887 42
Irrigation fees.....	404 51		404 51
Survey fees.....	50,862 03		50,862 03
Patent fees and interchange.....	205 00		205 00
Map sales, office fees, &c.....	4,696 47		4,696 47
Examination fees, D.L.S.....	420 00		420 00
Refunds of refunds.....	1,230 76		1,230 76
Mining fees.....	1,367 50		1,367 50
Hay lands.....	1,104 95		1,104 95
Grazing lands.....	43,711 91	400 00	44,111 91
Coal lands.....	2,804 62		2,804 62
Stone quarries.....	1,526 38		1,526 38
Dredging leases.....	2,139 00		2,139 00
Townsite sales.....	9,085 32		9,085 32
Suspense account.....	3,696 97		3,696 97
Miscellaneous.....	2,022 80		2,022 80
	141,161 73	403 91	141,565 64
Refunds.....	1,478,749 51	11,753 80	1,490,503 31
	35,117 48		35,117 48
Total.....	1,443,632 03	11,753 80	1,455,385 83

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DOMINION LANDS REVENUE.

STATEMENT of Dominion Lands Revenue for the Fiscal Year 1905-1906, compared with the receipts for the previous fiscal year.

Agencies, &c.	Cash and Scrip 1905-1906.	Cash and Scrip 1904-1905.	Decrease.	Increase.
<i>Yukon Territory.</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Sales of land.....	6,949 29	7,637 04	687 75	
Rentals of land.....	14,549 92	18,496 93	3,947 01	
Survey fees.....	100 00	100 00		
Map sales, office fees, &c.....	111 50	161 00	49 50	
Timber dues.....	20,637 69	25,503 97	4,866 28	
Coal lands.....	550 30	69 93		480 37
Hay lands.....	194 50	283 00	88 50	
Grazing lands.....	10 00	9 92		08
Mining fees.....	86,842 75	92,854 00	6,011 25	
Export tax on gold.....	163,963 25	206,755 87	42,792 62	
Hydraulic leases.....	9,391 89	6,957 05		2,434 84
Dredging leases.....	881 70	385 78		495 92
Free miner's certificates.....	28,118 02	46,022 53	17,904 51	
Free certificates for export of gold.....	381 50	452 00	70 50	
Royalty on water sold.....		65 65	65 65	
Suspense account.....	2,295 75	953 50		1,342 25
	334,978 06	406,708 17	76,483 57	4,753 46
<i>Dominion Lands Agencies.</i>				
Alameda.....	48,565 37	30,225 25		18,340 12
Battleford.....	81,154 52	38,397 56		42,756 96
Brandon.....	15,505 70	11,946 33		3,559 37
Calgary.....	105,710 00	43,585 27		62,124 73
Dauphin.....	8,809 35	7,086 07		1,723 28
Edmonton.....	77,585 97	36,133 56		41,452 41
Kamloops.....	24,423 57	13,095 36		11,328 21
Lethbridge.....	184,343 08	63,305 95		121,039 13
Minnedosa.....	5,456 19	5,586 59	130 40	
New Westminster.....	4,994 60	4,431 85		562 75
Prince Albert.....	25,815 07	25,128 30		686 87
Red Deer.....	43,811 74	24,953 77		18,857 97
Regina.....	164,027 79	107,939 13		56,088 66
Winnipeg.....	47,262 22	26,925 00		20,337 22
Yorkton.....	56,513 55	55,326 56		1,186 99
	893,980 82	494,066 55	130 40	400,044 67
Carried forward.....	1,228,958 88	900,774 72	76,613 97	404,798 13

NOTE.—Decrease in Yukon Revenue, \$71,730.11.
Increase in Land Agencies, \$399,914.27.

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DOMINION LANDS REVENUE.

STATEMENT of Dominion Lands Revenue for the Fiscal Year 1905-1906, compared with the receipts for the previous fiscal year.

Agencies, &c.	Cash and Scrip 1905-1906.	Cash and Scrip 1904-1905.	Decrease.	Increase.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Brought forward.....	1,228,958 88	900,774 72	76,613 97	404,798 13
<i>Crown Timber Agencies.</i>				
Alameda	86 00	143 00	57 00	
Battleford	134 75	561 80	427 05	
Brandon	115 85	764 75	648 90	
Calgary	16,940 18	16,443 09		497 09
Dauphin	11,126 38	9,398 26		1,728 12
Edmonton	18,759 74	37,255 14	18,495 40	
Lethbridge	1,057 30	623 62		433 68
Minnedosa	1,083 08	890 60		192 48
New Westminster	82,482 97	70,979 27		11,503 70
Prince Albert	28,327 61	38,057 77	9,730 16	
Red Deer	337 66	1,017 68	680 02	
Regina	500 25	292 55		207 70
Winnipeg	110,154 02	64,689 16		45,464 86
Yorkton	941 05	330 80		610 25
	272,046 84	241,447 49	30,038 53	60,637 88
<i>Miscellaneous.</i>				
Rocky Mountains Park of Canada	18,883 83	14,059 55		4,824 28
Irrigation fees.....	528 25	303 00		225 25
Map sales, office fees, &c.	5,032 94	3,908 48		1,124 46
Survey fees	115,996 80	122,668 22	6,672 42	
Patent fees	426 25	560 00	133 75	
Examination fees, D.L.S.	474 00	906 50	432 50	
Refunds of refunds	154 44	285 50	131 06	
Mining fees	965 00	1,147 00	182 00	
Hay lands	2,685 55	2,152 99		532 56
Dredging leases	942 92	6,730 12	5,787 20	
Grazing leases	51,653 89	41,372 76		10,281 13
Coal lands	1,735 88	698 90		1,036 98
Rent of water-power.....	115 93	49 77		66 16
Rentals of land	191 24	115 74		75 50
Assay charges	1,111 17	1,480 67	369 50	
Suspense account	6,652 14			6,652 14
Miscellaneous	760 33	720 94		39 39
	208,309 56	197,160 14	13,708 43	24,857 85
	1,709,315 28	1,339,382 35	120,360 93	490,293 86
Refunds ..	33,418 36	25,786 90		7,631 46
Total.....	1,675,896 92	1,313,595 45	120,360 93	482,662 40

NOTE.—Increase in Crown Timber Agencies, \$30,599.35.
 " " Miscellaneous, including refunds, \$3,517.96.
 Net increase, \$362,301.47.

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DOMINION LANDS REVENUE.

STATEMENT of Receipts on Account of Dominion Lands Revenue for the Fiscal Period ended March 31, 1907 (Net Cash Revenue, nine months).

Particulars.	Amount.	
	\$	cts.
Homestead fees.....	215,449	55
Improvements.....	39,763	63
General sales of lands ..	494,117	12
Map sales, office fees, &c.....	5,449	06
Rental of lands.....	2,196	73
Timber dues.....	379,476	32
Grazing lands.....	43,711	91
Coal lands.....	3,321	96
Hay permits.....	1,209	95
Mining fees.....	103,701	75
Hydraulic leases.....	3,345	83
Dredging leases.....	4,099	00
Export tax on gold.....	82,622	42
Free miner's certificates.....	13,309	75
Free certificates for export of gold.....	215	50
Rent of water-power.....	500	00
Survey fees.....	50,962	03
Irrigation fees.....	404	51
Fees <i>re</i> Board of Examiners, D.L.S.....	420	00
Rocky Mountains Park of Canada.....	15,883	51
Patents fees and interchange fees.....	685	00
Refunds of refunds.....	1,230	76
Stone quarries.....	1,526	38
Townsite sales.....	9,085	32
Suspense account.....	4,284	97
Miscellaneous.....	1,776	50
	1,478,749	51
Refunds.....	35,117	48
	1,443,632	03

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STATEMENT of Receipts of Dominion Lands Revenue for the Fiscal Year ended June 30, 1906, compared with the Receipts for the previous year.

(NET CASH REVENUE.)

Particulars.	1905-1906.		1904-1905.		Increase.		Decrease		Net Increase.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Homestead fees.....	417,834	25	304,806	25	113,028	00				
Improvements.....	31,795	19	21,571	25	10,223	94				
General sales of land.....	442,588	69	154,128	04	288,460	65				
Map sales, office fees, &c.....	6,042	34	4,879	13	1,163	21				
Timber dues.....	292,684	53	266,951	46	25,733	07				
Grazing lands.....	51,583	89	36,145	32	15,438	57				
Coal lands.....	2,286	18	768	83	1,517	35				
Hay permits.....	2,880	05	2,435	99	444	06				
Mining fees.....	87,807	75	94,001	00			6,193	25		
Hydraulic leases.....	9,391	89	6,957	05	2,434	84				
Dredging leases.....	1,824	62	7,115	90			5,291	28		
Export tax on gold.....	163,963	25	206,755	87			42,792	62		
Free miner's certificates.....	28,118	02	46,022	53			17,904	51		
Rent of water-power.....	115	93	49	77	66	16				
Royalty on water sold.....			65	65			65	65		
Free certificates for export of gold.....	381	50	452	00			70	50		
Patent and inter-change fees.....	976	25	1,205	00			228	75		
Survey fees.....	116,095	80	122,763	22			6,672	42		
Irrigation fees.....	528	25	303	00	225	25				
Extra assay charges.....	1,111	17	1,480	67			369	50		
Rocky Mountains Park of Canada.....	18,883	83	14,044	55	4,839	28				
Yoho Park.....										
Rentals of lands.....	14,980	97	18,694	48			3,713	51		
Fees <i>re</i> examinations of D.L.S.....	474	00	906	50			432	50		
Suspense account.....	8,947	89			8,947	89				
Miscellaneous.....	284	47	1,976	94			1,692	47		
	1,701,580	71	1,314,485	40	472,522	27	85,426	96		
Refunds.....	33,418	36	22,184	26	11,234	10				
Totals.....	1,668,162	35	1,292,301	14	461,288	17	85,426	96	375,861	21

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STATEMENT of the Rocky Mountains Park Revenue for the Nine Months ended
March 31, 1907.

Particulars.	July 1, 1906, to March 31, 1907.		Total.
	\$	cts.	
Rent	3,873	01	
Timber dues	679	46	
Water rates	183	75	
Cave and Basin (tickets)	1,950	75	
Hot Springs (tickets)	2,121	00	
Dog licenses	193	00	
Drivers and livery licenses	226	00	
Peddlers' licenses	14	00	
Billiard and pool licenses	33	35	
Butcher licenses	20	00	
Boat licenses	32	00	
Grazing lands	182	50	
Camping permits	15	00	
Coal lands	6,215	44	
Transfer fees	64	00	
Lime	30	50	
Fines	49	50	
Miscellaneous	25		
Total cash			15,883 51
Scrp.			3 91
			15,887 42

NOTE—The revenue for the corresponding nine months of the previous fiscal year was \$13,088.01. The total revenue collected in the Park from the commencement to March 31, 1907, was \$106,085.25.

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STATEMENT showing yearly the Gross Revenue (in cash only) received from all sources from July 1, 1886, to March 31, 1907.

Fiscal Year.	Dominion Lands (Cash).	School Lands.	Seed Grain.	Ordnance Lands.	Fines and Forfeitures.	Registration Fees.	Casual Revenue.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1886-1887.	183,114 78	35,707 41	.....	21,676 57	3,249 25	3,347 16	90 15	247,155 82
1887-1888.	225,360 73	42,045 11	.....	36,259 88	1,267 05	7,212 02	372 79	310,497 58
1888-1889.	243,046 84	42,354 94	26,146 13	42,072 07	739 25	6,543 53	1,075 36	371,978 12
1889-1890.	224,770 16	45,188 57	5,017 44	29,421 61	958 75	8,866 39	261 63	314,984 55
1890-1891.	268,751 35	38,826 33	3,385 40	54,229 69	1,955 02	10,866 65	627 81	380,282 45
1891-1892.	337,106 97	136,131 80	5,957 65	42,360 80	788 92	9,302 11	532 14	532,179 49
1892-1893.	303,550 86	82,615 22	5,866 21	33,776 90	777 00	10,750 38	1,331 96	438,668 53
1893-1894.	- 214,540 30	47,574 11	2,339 16	22,318 20	864 15	10,358 02	1,982 04	299,975 98
1894-1895.	171,085 48	47,665 10	2,752 56	22,045 97	693 85	9,811 77	875 36	255,530 09
1895-1896.	174,009 38	56,584 32	8,748 05	17,550 28	502 00	8,737 87	1,920 66	298,552 56
(Total, 10 years)	2,343,835 95	584,692 91	62,212 80	322,791 97	11,435 21	85,765 90	9,069 90	3,419,804 67
1896-1897.	187,424 19	24,292 43	9,887 13	9,831 27	1,316 00	8,997 24	2,683 05	244,431 31
1897-1898.	780,313 10	52,410 82	12,351 71	22,637 17	529 06	14,263 50	260 92	1,082,606 28
1898-1899.	1,063,020 74	41,249 77	12,388 69	12,349 65	2,801 63	19,220 73	2,620 91	1,653,651 52
1899-1900.	1,410,883 48	220,874 78	15,271 84	11,043 53	1,452 92	21,751 90	3,664 00	1,634,942 45
1900-1901.	1,533,197 07	88,049 83	15,711 63	14,604 47	1,977 96	33,979 77	1,687 57	1,694,108 30
1901-1902.	1,254,333 56	133,410 75	20,293 06	16,967 36	1,955 61	50,854 99	3,900 62	1,541,715 95
1902-1903.	1,716,597 20	392,789 97	28,789 97	17,612 79	5,220 88	81,404 18	2,280 26	2,244,062 21
1903-1904.	1,478,106 33	392,969 62	26,122 30	39,491 34	5,911 92	109,233 73	3,402 94	1,887,941 18
1904-1905.	1,314,185 40	332,914 48	16,471 34	10,346 90	10,018 49	123,082 86	4,258 14	1,811,577 61
1905-1906.	1,701,880 71	608,960 79	12,577 29	10,893 17	3,304 77	180,310 73	8,496 09	2,526,123 55
	13,439,941 78	2,148,140 20	169,864 96	156,680 65	34,788 61	643,099 63	33,104 50	16,325,320 36
1906-1907 (9 months).....	15,483,777 73	2,722,833 11	232,077 76	479,472 62	45,923 88	728,865 53	42,174 40	19,745,125 03
	1,478,749 51	721,353 73	10,850 06	6,663 90	21 00	46,124 20	11,785 81	2,278,548 21
(Total, 10 yrs. & 9 months).	14,618,691 29	2,872,493 93	180,715 02	163,344 55	31,509 64	680,223 83	44,890 31	18,602,868 57
	16,062,527 24	3,457,186 84	242,927 82	486,136 52	45,944 88	774,989 73	53,960 21	22,023,673 24

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STATEMENT showing Receipts on Account of Dominion Lands from July 1, 1872, to March 31, 1907.

Fiscal Year.	Homestead Fees.	Pre-emption Fees.	Improvements.	SALES.		Map Sales, Office and Registration Fees, &c.	Surveyor's Examination Fees.		Survey Fees, Miscellaneous, including Trust.	Inspection, Cancellation and Sundry Fees.	Timber Dues.
	\$ cts.	% cts.	\$ cts.	Cash.	Scrp.	\$ cts.	\$ cts.	% cts.	% cts.	% cts.	\$ cts.
1872-73	6,960 00			19,170 20							100 25
1873-74	7,310 00			19,834 75							2,710 55
1874-75	11,510 00			13,665 00		129 90					2,335 25
1875-76	4,680 00			3,475 94							387 00
1876-77	2,250 00			1,083 86	320 00						320 00
1877-78	14,540 00			2,734 86	126,955 16						1,620 00
1878-79	17,690 00			43,708 97	210,904 84	4 60					325 00
1880-81	41,255 00	10,241 43	293 00	71,170 17	70,828 30	81 00					25,121 46
1881-82	20,450 00	39,843 90	1,758 00	43,708 97	81,685 86	245 40					32,028 34
1882-83	54,155 00	28,813 90	7,114 91	70,828 30	3,036 45	3,036 45					58,753 14
1883-84	73,015 00	54,725 00	2,596 11	1,240,328 27	33,638 40	3,109 50					90,066 46
1884-85	25,645 00	17,100 00	2,328 75	516,092 21	40,919 67	1,289 55					137,983 10
1885-86	26,110 00	14,371 00	1,101 50	424,863 36	45,875 67	1,621 82					64,820 31
1886-87	19,014 00	6,887 93	1,971 55	76,140 41	214,657 97	1,339 34					65,111 74
1887-88	28,091 00	4,850 00	1,918 35	48,175 76	337,640 19	1,171 39					72,778 53
1888-89	39,460 00	10,550 00	4,128 36	52,238 36	313,522 67	1,660 75					90,290 00
1889-90	35,920 00	8,580 00	3,250 54	57,513 16	228,744 47	2,099 07					94,964 55
1890-91	20,164 10		6,302 61	54,896 85	318,228 57	1,410 16					84,642 95
1891-92	46,934 10		6,472 31	91,664 98	298,744 47	2,147 31					102,902 71
1892-93	37,639 74		7,113 50	93,071 07	97,822 14	1,854 78					106,461 35
1893-94	30,462 56		3,497 76	53,234 71	77,231 18	475 20					103,865 24
1894-95	20,064 88		3,567 90	37,293 71	23,269 62	635 99					74,079 50
1895-96	18,278 00		3,163 15	46,373 98	46,229 65	755 05					61,923 47
1896-97	21,779 00		3,757 01	49,335 53	16,929 38	610 78					68,992 82
1898-99	58,235 00		5,649 63	80,178 04	28,918 14	1,987 40					119,313 78
1899-1900	72,690 00		4,297 62	116,598 35	21,307 58	1,262 05					135,360 63
1900-1901	79,910 00		4,835 81	163,247 58	88,756 22	1,258 85					136,345 82
1901-1902	144,425 00		5,213 32	40,360 93	326,270 63	3,874 14					209,389 32
1902-1903	320,469 65		8,481 46	66,950 21	169,707 13	5,792 96					297,790 90
1903-1904	255,772 36		11,829 08	155,507 59	158,452 66	5,911 96					470,916 93
1904-1905	304,806 25		15,119 47	196,750 15	188,424 22	5,549 13					397,344 33
1905-1906	417,834 25		21,571 25	154,128 04	194,644 59	4,879 13					292,684 53
1906-1907	215,449 55		31,795 19	442,588 69	7,654 57	6,042 34					379,476 32
1906-1907 (nine months)			39,763 63	494,117 12	11,349 89	5,449 65					
	2,589,579 04	206,741 01	208,847 79	5,182,355 63	3,686,675 45	67,212 07					4,078,163 41

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STATEMENT showing Receipts on Account of Dominion Lands from July 1, 1872, to March 31, 1907—*Concluded.*

Fiscal Year.	GRAZING LANDS.			HAY PERMITS, MINING, STONE QUARRIES, EXPORT TAX ON GOLD, &c.			Rocky Mountains Park of Canada.		COLONIZATION LANDS.		Gross Revenue.	Refunds.	Net Revenue.	
	Cash.		Scrip.	Cash.		Scrip.	Cash.		Scrip.					
	%	cts.		%	cts.		%	cts.		%			cts.	
1872-73.											26,239 45		26,239 45	
1873-74.											29,980 80		29,980 80	
1874-75.											27,641 15		27,641 15	
1875-76.											8,865 94		8,865 94	
1876-77.											140,755 02		140,755 02	
1877-78.											139,584 40		139,584 40	
1878-79.											234,732 93		234,732 93	
1879-80.											206,801 37		206,801 37	
1880-81.											1,805,734 87		1,805,734 87	
1881-82.	2,245 00			40 00					354,036 17		5,038 22	4,636 08	202,165 29	
1882-83.	22,844 43			913 91					248,492 01		10,687 55	8,746 05	201,952 32	
1883-84.	11,370 60			640 90					233,713 40		9,220 50	9,220 50	1,042,657 55	
1884-85.	17,089 75			815 63					1,214 22		1,001,776 67	12,070 85	992,536 17	
1885-86.	29,562 51			1,284 83							457,544 65	63,389 12	434,154 53	
1886-87.	14,242 77			1,570 40	80 00			2,951 58			588,532 80	13,543 16	565,889 64	
1887-88.	5,922 47			2,273 73	80 00			2,528 73		10,000 00	594,088 04	6,277 66	563,709 02	
1888-89.	2,207 69			3,946 55				1,094 37		16,000 00	462,536 26	8,209 74	388,801 81	
1889-90.	1,305 57			9,242 08				2,397 35		4,460 50	460,990 76	7,195 27	453,795 49	
1890-91.	3,079 55			8,628 44	160 00			3,648 45			392,324 43	15,291 39	377,015 82	
1891-92.	3,726 80			5,016 85				4,983 23			452,151 08	18,314 97	433,836 11	
1892-93.	6,380 80			6,265 13				2,523 92			250,069 12	4,544 01	245,525 11	
1893-94.	5,740 79			6,243 15				2,921 87			267,694 93	8,363 79	259,331 14	
1894-95.	5,353 72			5,813 51				2,734 82			206,833 57	15,010 54	191,823 03	
1895-96.	7,071 86			6,255 90				3,045 65			1,069,741 63	4,678 55	1,065,063 08	
1896-97.	4,715 01			2,500 00				2,994 16			1,503,743 00	32,256 39	1,471,486 61	
1897-98.	4,728 58			510 39				2,727 60			1,874,139 09	18,368 85	1,855,770 24	
1898-99.	5,245 88			1,130,371 60				4,047 31			1,452,679 25	27,165 55	1,425,513 70	
1899-1900.	8,382 86			1,038,195 42	20 00			*2,861 13			1,890,886 83	21,519 84	1,869,366 99	
1900-1901.	4,726 28			1,101,808 33	20 00			*9,198 48			1,681,824 70	36,721 75	1,645,102 95	
1901-1902.	7,292 46			8,409 27				*14,059 55			1,339,382 35	25,786 90	1,313,595 45	
1902-1903.	13,913 33			607,722 05				*4,103 59			1,700,315 28	33,418 36	1,666,896 92	
1903-1904.	19,790 27			495,579 18				18,883 83			1,478,749 51	35,117 48	1,443,632 03	
1904-1905.	15,292 15			364,923 59				*15,887 42						
1905-1906.	36,145 32			296,769 19										
1906-1907 (nine months).	51,583 89			80 00										
	43,711 91			213,852 59										
				360 00										
	338,380 10			6,753,478 97				*106,085 25			25,703,066 07	484,272 07	25,230,547 80	

*Including scrip.

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REVENUE.

Owing to the fact that these statements cover the revenue for nine months only of the past fiscal year, it has not been found advisable to establish a comparison with the previous corresponding nine months as regards each source of revenue as shown in the various detailed statements, but such a comparison has been made with reference to the gross revenue, and it is gratifying to note that this shows an increase of \$753,333.28. It may be mentioned, however, that the item referred to covers an increase of \$396,439.55 derived from the sale of school lands which cannot properly be classified as a Dominion asset. Nevertheless, exclusive of this amount, there remains the substantial increase of \$356,893.73 in the gross cash revenue of the department during the period mentioned. For convenience, and for purposes of comparison, the detailed statements of revenue, both as regards cash and scrip, and as regards cash only, for the years 1904-1905 and 1905-1906, have been re-inserted in this year's report.

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STATEMENT of Land Sales by Railway Companies having Government

YEAR.	HUDSON'S BAY COMPANY.		CANADIAN PACIFIC RAILWAY COMPANY.		MANITOBA SOUTH-WESTERN COLONIZATION RAILWAY COMPANY.		QU'APPELLE, LONG LAKE AND SASKATCHEWAN RAILROAD AND STEAM-BOAT COMPANY.	
	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.
		\$		\$		\$		\$
1893.....			93,184	295,288	14,164	57,559	1,603	.....
1894.....	7,526	48,225	43,155	131,628	6,312	28,003	640	.....
1895.....	4,431	23,209	55,453	176,950	5,623	22,330	2,391	.....
1896.....	9,299	52,410	66,624	220,360	21,254	88,568	286	.....
1897.....	10,784	53,277	135,681	431,095	63,800	234,644	2,524	.....
1898.....	62,000	310,000	242,135	757,792	106,473	363,982	22,534	.....
1899.....	56,875	274,625	261,832	814,857	58,019	199,458	61,030	178,517
(Fiscal Year) 1900.....	70,196	352,631	379,091	1,152,836	133,507	437,449	18,932	53,974
(Fiscal Year) 1901.....	82,308	399,804	339,985	1,046,665	59,749	214,953	22,266	74,810
(Fiscal Year) 1902.....	269,577	1,412,332	1,362,478	4,440,500	206,411	713,365	39,835	147,365
(Fiscal Year) 1903.....	330,046	1,939,804	2,260,722	8,472,250	250,372	699,210	843,900	1,476,900
(Fiscal Year) 1904.....	144,857	879,910	857,474	3,516,864	29,522	113,303	.....	.....
(Fiscal Year) 1905.....	139,721	865,905	411,451	2,045,800	80,342	296,936	.....	.....
(Fiscal Year) 1906.....	236,191	1,863,375	1,012,322	6,015,060	83,418	360,889	.....	.....
(9 months to March 31, 1907).....	69,158	742,221	851,083	4,817,632	3,051	22,645	1,353	16,789
Totals	1,492,969	9,217,728	8,372,670	34,335,577	1,122,017	3,853,294	1,017,294	1,948,355

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Land Grants and by the Hudson's Bay Company.

CALGARY AND EDMONTON RAILWAY COMPANY.		CANADIAN NORTHERN RAILWAY COMPANY.		GREAT NORTHWEST CENTRAL RAILWAY COMPANY.		TOTALS.		AVERAGE PER ACRE.
Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	Acres.	Amount.	
	\$		\$		\$		\$	\$ cts.
11,260	.....	.....	.....	.....	.....	120,211	352,847	2 93
11,035	.....	.....	.....	.....	.....	68,668	207,856	3 02
46,815	.....	.....	.....	.....	.....	114,713	222,489	1 94
10,553	.....	.....	.....	.....	.....	108,016	361,338	3 34
9,436	.....	.....	.....	.....	.....	222,225	719,016	3 23
15,481	.....	.....	.....	.....	.....	448,623	1,431,774	3 18
24,738	53,335	.....	.....	.....	.....	462,494	1,520,792	3 28
46,653	128,256	.....	.....	.....	.....	648,379	2,125,146	3 27
116,719	352,037	.....	.....	.....	.....	621,027	2,088,269	3 36
323,494	1,033,396	.....	.....	.....	.....	2,201,795	7,746,958	3 56
231,800	909,600	183,736	631,503	128,435	522,490	4,229,011	14,651,757	3 46
129,007	563,507	64,469	313,575	41,858	177,081	1,267,187	5,564,240	4 39
105,191	512,898	231,707	1,221,469	17,593	103,564	990,005	5,046,572	5 09
85,784	480,063	204,966	1,014,351	20,003	137,503	1,642,684	9,871,241	6 01
59,515	346,061	289,576	1,711,109	4,023	41,470	1,277,759	7,697,930	6 02
1,231,481	4,379,156	974,454	4,892,007	211,912	982,108	14,422,797	59,608,225

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The following is a comparative statement of the homestead entries and sales which have been made at the several agencies of the department during the nine months ending March 31, 1906, and March 31, 1907, respectively:—

	NINE MONTHS ENDING MARCH 31, 1906.		NINE MONTHS ENDING MARCH 31, 1907.	
	No. of Entries.	Acres.	No. of Entries.	Acres.
Homesteads	25,728	4,116,480	21,647	3,463,520
Sales		64,301		56,430

The following statement shows the number of homestead entries reported in each year since 1874:—

Departmental Year ended	Number of Entries.
October 31, 1874.	1,376
“ 31, 1875.	499
“ 31, 1876.	347
“ 31, 1877.	845
“ 31, 1878.	1,788
“ 31, 1879.	4,068
“ 31, 1880.	2,074
“ 31, 1881.	2,753
“ 31, 1882.	7,483
“ 31, 1883.	6,063
“ 31, 1884.	3,753
“ 31, 1885.	1,858
“ 31, 1886.	2,657
“ 31, 1887.	2,036
“ 31, 1888.	2,655
“ 31, 1889.	4,416
“ 31, 1890.	2,955
“ 31, 1891.	3,523
“ 31, 1892.	4,840
“ 31, 1893.	4,067
“ 31, 1894.	3,209
December 31, 1895.	2,394
“ 31, 1896.	1,857
“ 31, 1897.	2,384
“ 31, 1898.	4,848
“ 31, 1899.	6,689
June 30, 1900.	7,426
“ 30, 1901.	8,167
“ 30, 1902.	14,673
“ 30, 1903.	31,383
“ 30, 1904.	26,073

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Departmental Year ended	Number of Entries.
" 30, 1905..	30,819
" 30, 1906..	41,869
9 months ended March 31, 1907..	21,647

STATEMENT showing the number of homestead entries made during the nine months ended March 31, 1907, and the nationality of the homesteaders, as reported by the several agencies of the department in Manitoba, Saskatchewan, Alberta and British Columbia.

Nationalities.	Number of Entries.
Canadians from Ontario..	3,517
" Quebec..	418
" Nova Scotia..	157
" New Brunswick..	92
" Prince Edward Island..	87
" Manitoba..	640
" Saskatchewan..	500
" Alberta..	355
" British Columbia & 5, Yukon 2..	87
Persons who had previous entry..	2,199
Newfoundlanders..	1
Canadians returned from the United States..	493
Americans..	6,059
English..	3,032
Scotch..	807
Irish..	252
French..	173
Belgians..	57
Swiss..	29
Italians..	2
Roumanians..	51
Syrians..	13
Germans..	352
Austro-Hungarians..	1,172
Hollanders..	31
Danes (other than Icelanders)..	44
Icelanders..	69
Swedes..	253
Norwegians..	281
Russians (other than Mennonites and Doukhobors)..	363
Mennonites..	6
Doukhobors..	36
Chinese..	1
Japanese..	
Persians..	3
Australians..	9

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Nationalities.	Number of Entries.
New Zealanders.. . . .	3
Argentinians.. . . .	1
Armenians.. . . .	1
Servians.. . . .	1

Total.. . . . 21,647

Representing 52,524 souls.

STATEMENT showing the number of homestead entries made during the nine months ended March 31, 1907, by persons coming from the various states and territories of the American Union.

States.	Number of Entries.
Arizona.. . . .	2
Alabama.. . . .	4
Alaska.. . . .	2
Arkansas.. . . .	11
California.. . . .	54
Carolina, North.. . . .	3
Carolina, South.. . . .	
Colorado.. . . .	27
Columbia, District of.. . . .	
Connecticut.. . . .	8
Dakota, North.. . . .	1,697
Dakota, South.. . . .	315
Delaware.. . . .	
Florida.. . . .	
Georgia.. . . .	1
Idaho.. . . .	107
Illinois.. . . .	312
Indiana.. . . .	76
Indian Territory.. . . .	7
Iowa.. . . .	509
Kansas.. . . .	139
Kentucky.. . . .	13
Louisiana.. . . .	4
Maine.. . . .	13
Maryland.. . . .	4
Massachusetts.. . . .	50
Michigan.. . . .	327
Minnesota.. . . .	1,161
Mississippi.. . . .	1
Missouri.. . . .	135
Montana.. . . .	199
Nebraska.. . . .	153
Nevada.. . . .	4

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States.	Number of Entries.
New Hampshire.. . . .	10
New Jersey.. . . .	2
New Mexico.. . . .	2
New York.. . . .	94
Ohio.. . . .	146
Oklahoma.. . . .	87
Oregon.. . . .	110
Pennsylvania.. . . .	61
Rhode Island.. . . .	7
Tennessee.. . . .	5
Texas.. . . .	17
Utah.. . . .	26
Vermont.. . . .	16
Virginia.. . . .	4
Washington.. . . .	324
Wisconsin.. . . .	284
Wyoming.. . . .	19
Total.. . . .	6,552

STATEMENT showing the Number of Letters Patent issued by the Department of the Interior in each year since 1874.

Period.	Number Issued.
Year ended October 31, 1874.. . . .	536
" 31, 1875.. . . .	492
" 31, 1876.. . . .	375
" 31, 1877.. . . .	2,156
" 31, 1878.. . . .	2,597
" 31, 1879.. . . .	2,194
" 31, 1880.. . . .	1,704
" 31, 1881.. . . .	1,768
" 31, 1882.. . . .	2,766
" 31, 1883.. . . .	3,591
" 31, 1884.. . . .	3,837
" 31, 1885.. . . .	3,257
" 31, 1886.. . . .	4,570
" 31, 1887.. . . .	4,599
" 31, 1888.. . . .	3,275
" 31, 1889.. . . .	3,282
" 31, 1890.. . . .	3,273
" 31, 1891.. . . .	2,449
" 31, 1892.. . . .	2,955
" 31, 1893.. . . .	2,936
" 31, 1894.. . . .	2,553

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Period.	Number Issued.
Year ended December 31, 1894.. . . .	2,682
“ 31, 1895.. . . .	2,118
“ 31, 1896.. . . .	2,665
“ 31, 1897.. . . .	2,972
“ 31, 1898.. . . .	3,037
“ 31, 1899.. . . .	3,904
Six months ended June 30, 1900.. . . .	1,970
Year ended June 30, 1901.. . . .	6,461
“ 30, 1902.. . . .	8,768
“ 30, 1903.. . . .	7,349
“ 30, 1904.. . . .	6,890
“ 30, 1905.. . . .	8,798
“ 30, 1906.. . . .	12,370
Nine months ended March 31, 1907.. . . .	10,596

STATEMENT showing the Number of Homestead Entries made during the last 9 months (from July 1, 1906, to March 31, 1907), at the several Dominion Lands Agencies.

Agency.	No.	Month.	No.
		1906.	
Alameda	1,106	July.....	4,174
Battleford.....	3,208	August.....	3,388
Brandon.....	82	September	2,595
Calgary.....	971	October.....	3,389
Dauphin.....	357	November.....	2,966
Humboldt.....	751	December.....	1,402
Edmonton.....	2,770		
		1907.	
Kamloops	46		
Lethbridge.....	1,418		
Minnedosa.....	54	January.....	1,111
Moosejaw.....	57	February.....	1,033
New Westminster.....	26	March	1,589
Prince Albert.....	1,003		
Regina.....	5,668		
Red Deer.....	1,684		
Winnipeg.....	738		
Yorkton	1,708		
	21,647		21,647

HOMESTEAD ENTRIES AND SALES.

It will be seen, from the statement of entries recorded during the past nine months, that there has been a falling off as compared with the previous year. Basing an estimate of the total number of entries during the twelve months ending July 1, of this year, upon the monthly ratio of the nine months covered by the present statement, the result would be 28,856, as compared with 41,869 during the year ending

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June 30, 1906. It should be borne in mind, however, that the months of April, May and June are those during which the largest number of entries are usually made consequent upon the large influx of settlers at this season of the year.

HOMESTEAD MAP.

Attention is also called to the statement showing the number of entries made at each agency during the nine months covered by the report, as this must be taken as the best indication of the general trend of settlement. In this relation I may say that the homestead map that was issued, under your direction, in the spring of last year, and of which three revised editions have since been published and distributed, has filled a long felt want, and has contributed in no small degree in advertising abroad the agricultural districts still available for settlement in the west. This map was prepared by Mr. R. E. Young, the Superintendent of Railway and Swamp Lands, and such precision and care were exercised in its compilation that it may be referred to as an accurate record of the standing of each quarter-section in every surveyed township. The map has met with such popular favour that it is proposed to issue revised editions from time to time, according to requirements.

SALES.

There has been a decrease in the area of lands disposed of by railway companies during the past year, as compared with the year 1905-6, but as will be seen from the figures given in the column which has been added to the statement, showing the average price per acre realized from the sale of land, there has been a steady advance from the year 1903, when it was \$3.46 per acre, to \$6, during the past year. As the value of land is generally accepted as an indication of the prosperity of the country, the advance shown by the statement is a very satisfactory feature, when considered in connection with the general development of the western provinces.

CORRESPONDENCE.

The following statement shows the number of letters received and sent by the department in each year since its establishment:—

Departmental Year ended October 31.	Letters Received.	Letters Sent.	Total.
1874	3,482	4,120	7,632
1875	1,974	2,189	4,163
1876	2,255	3,097	5,353
1877	3,137	3,677	6,814
1878	4,642	6,609	10,651
1879	5,586	6,179	11,755
1880	8,222	9,910	18,162
1881	13,605	15,829	29,434
1882	25,500	30,300	55,800
1883	27,180	33,500	60,680
1884	27,525	33,386	60,911
1885	33,970	43,997	77,967
1886	60,964	67,973	128,937
1887	47,845	50,890	108,735
1888	43,407	52,298	95,705
1889	48,316	50,500	98,816
1890	35,200	36,008	72,208
1891	38,000	36,267	74,267
1892	41,990	42,203	84,193
1893	50,794	48,145	98,939
1894	48,619	50,840	99,459
1895	49,991	45,898	95,889
1896	47,501	44,238	91,739
1897	65,714	64,147	129,861
1898	88,913	87,845	176,758
1899	95,023	91,876	186,899
1900	121,219	133,177	254,396
1901	144,978	136,348	281,326
1902	167,200	185,548	352,748
1903 (From June 30, 1902, to July 1, 1903)	185,582	223,463	409,045
1904 (From June 30, 1903, to July 1, 1904)	222,416	274,675	496,991
1905 (From June 30, 1904, to July 1, 1905)	245,470	302,723	548,193
1906 (From June 30, 1905, to July 1, 1906)	407,794	529,465	937,259
1907 (From June 30, 1906, to April 1, 1907)	372,231	620,968	993,199

The number of registered letters during the nine months of the departmental year ending March 31, 1907, was: received, 6,740; sent, 26,541.

DOMINION LANDS.

The report of the Commissioner of Dominion Lands, which covers the operations of all the lands and Crown timber offices under his supervision in the western provinces, will be found under Part I. of the general report. The work in this important branch of the service has increased considerably during the past nine months, as evidenced by the condensed statement showing the total number of land cases dealt with and the certificates of patents issued at headquarters. Of the former, 119,459 were examined and passed upon, as compared with 83,058 during the preceding corresponding period, and of the latter, 10,674 were issued in favour of actual settlers who had earned title to their lands, being an increase of 3,990 over the previous nine months. The work throughout the various agencies has, on the whole, been conducted in a very satisfactory manner. The system now in force for the administration of the public lands, based as it is, upon clear and well-defined regulations which ensure the

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honest performance by the settler of the duties attaching to his entry as regards residence and cultivation, and at the same time afford him every facility, within the spirit of the law, to earn title to his holding, would appear to have fully attained the object which the government had in view when the same was framed.

It will be observed also that although the past winter has been a somewhat severe one, only very few cases of actual distress are reported to have existed in the various land districts. The fact must not be lost sight of that with the advent of thousands of incoming settlers in quest of arable land, the department has been compelled to locate many of them in outlying surveyed districts not yet served by railway connections, and amongst these, it must be stated with regret, a limited number suffered through shortage of fuel and provisions. Such cases, however, were comparatively few, and prompt action was taken by the department to relieve any cases of actual distress that were found to exist. When one considers the vastness of the fields open for settlement in the west, the unprecedented influx of settlers, and the large number of entries granted during the past five years for lands lying in the outskirts of the belts served by railways, it is gratifying to note that the unprecedented severity of the past winter has not shaken the confidence of those whose good fortune it has been to become the possessors of our free homestead lands. On the contrary, there has been an increased activity in spring operations, and the prospects, at the present time, for another bountiful harvest are most promising.

COAL LANDS.

Consequent upon the large influx of population into the west numerous demands were received for the purchase of lands known to contain coal. As a considerable area of these lands had already been granted in the past in fee simple, which left the owner at liberty to develop the same or not as he might deem advisable in his own interest, it was felt that in the interest of the country all coal lands should be withdrawn from sale, and disposed of under a system of leasing which would ensure the development of the mines.

By an order in council dated March 4, 1907, the regulations governing the sale of coal mining lands in Manitoba and the Northwest Territories (including the provinces of Saskatchewan and Alberta), and in the province of British Columbia were, therefore, suspended from operation, and provision was made that all applications received on and after that date for permission to purchase coal mining lands should be dealt with under the provisions of regulations to be established in lieu thereof. By an order in council dated May 9, 1907, the regulations governing the sale of coal mining lands in the Yukon Territory were also rescinded, and by an order in council bearing the same date regulations were established for the leasing of coal mining rights, the property of the Crown, in the provinces of Manitoba, Saskatchewan and Alberta, the Yukon Territory, the Northwest Territories, the Railway Belt in the province of British Columbia, and within the tract containing three and one-half million acres of land acquired by the Dominion government in the province of British Columbia, under the provisions of chapter 59 of the Revised Statutes of Canada, 1906.

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Under these regulations an applicant may lease the coal mining rights under an area not exceeding 2,560 acres, such tract to be described by section, part of section, township and range, if it is situated in surveyed territory, and to be defined by staking and described by metes and bounds if it is situated in unsurveyed territory.

The term of the lease is twenty-one years, and the rental one dollar an acre payable yearly in advance. A royalty of five cents per ton of 2,000 pounds is collected on the merchantable output of the mine. Application for a lease must be made to the agent of Dominion lands for the district in which the tract applied for is situated, and each application must be accompanied by the fee of \$5. The lease includes the coal mining rights only, but permission may be granted the lessee to purchase, at the rate of \$10 an acre, whatever surface rights may be considered necessary for the proper working of the mine.

IMMIGRATION.

COMPARATIVE statement of arrivals at inland and ocean ports during the ten years ending June 30, 1906.

ARRIVALS.

Year.	Great Britain and Ireland.	Other Countries.	United States.	Total.
1896-7	11,383	7,921	2,412	21,716
1897-8	11,173	11,608	9,119	31,900
1898-9	10,600	21,938	11,945	44,543
1899-1900	* 5,141	* 10,211	* 8,543	23,895
1900-1	11,810	19,352	17,987	49,149
1901-2	17,250	23,732	26,388	67,379
1902-3	41,792	37,059	49,473	128,364
1903-4	50,374	34,785	45,171	130,330
1904-5	65,359	37,255	43,632	146,266
1905-6	86,796	44,349	57,919	189,064
1906-7 (nine months ending March 31)	55,791	34,217	34,659	124,667
	367,538	282,467	307,268	957,273

* Arrivals for six months only.

The report of the Superintendent of Immigration, which covers full statements of arrivals during the past nine months, as well as the reports of the officers under his charge, both in Canada and abroad, forms Part II. of the general report.

During the nine months ending April 1, last, there arrived in Canada 124,667 immigrants, being an increase of 34,104 over the preceding corresponding period. On the whole, considering the fact that a large proportion of these new arrivals have found their way to the western provinces, with a view to becoming agriculturists, and that the assimilation of these new elements is being effected without in any way disturbing existing conditions, it may safely be stated that the immigrants who landed on our shores, or the settlers who came from the neighbouring republic during the past few years, were of a highly desirable class.

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BRITISH IMMIGRATION.

Of the total immigration during the past nine months, 55,791 came from the British Isles. While on this subject, I desire to call attention to the methods which have been followed by the department in its immigration work in the old country and the United States. The point that I would like to make clear is this: Has the large increase in the number of arrivals from these two countries within the past few years been due directly to the efforts put forth by the department, or has it been brought about, as claimed by some, by the force of circumstances, or through the inevitable process of some economic evolution? The second alternative would lead to theoretical considerations of such an abstract order that it would be very difficult to arrive at any practical or definite conclusion. As to the first alternative, however, this may be asserted, that before 1896 the immigration from the United States to the western provinces was nil. In 1897 a system of advertising, through five or six thousand newspapers in the agricultural districts of the United States, was inaugurated; concurrently with this hundreds of delegates from the States were sent to western Canada, and forthwith the number of Americans coming to Canada increased from practically nothing to over nine thousand in 1897-8, and has kept on increasing ever since until it reached fifty-seven thousand nine hundred and nineteen last year. From Great Britain and Ireland, for a number of years past we have been receiving an average of eleven thousand immigrants each year. This continued until the year 1901, when it was decided to apply the same method in England as had been followed in the United States. A general scheme of advertising was devised, involving an expenditure of large sums of money; delegates in large numbers were sent free from Canada, successful farmers or business men, who had moved to western Canada a quarter of a century ago and who had grown with the country. The whole of England, Scotland and Ireland was for a time invaded by these representative men from Canada, while at the same time thousands of newspapers in the old land proclaimed, through a well planned system of advertising, the advantages offered by Canada as a suitable field for British agriculturists. The result was identical with that obtained in the United States. In the year 1901-2 the number of British arrivals had increased to over seventeen thousand, the following year to over forty-one thousand, in 1903-4 to fifty thousand three hundred and seventy-four, and in 1905-6 eighty-six thousand seven hundred and ninety-six British settlers located in Canada. Like causes produced like effects.

These points have already been touched upon by my predecessor in office in previous reports, but I deem it my duty to refer to them again here, as it is proper that the first page of the history of the new western provinces should bear an unbiased and authentic record of the true causes that were directly instrumental in bringing about such conditions as made it imperative, in the interest of the country, to unfetter the old Northwest Territories from the state of vassalage in which its limited population had held it for the last thirty years, and extend to it the full powers and prerogatives of provincial autonomy.

Viewed in the light of past events, the immigration methods followed by the department would appear to have been productive of the most beneficial results, and until it can be demonstrated that other means could, with advantage to Canada, be

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devised and adopted to foster Anglo-American immigration to this country, I would not recommend that any change be made in the policy now in force.

It is very satisfactory to note the statement contained in the report of the High Commissioner for Canada in London, that a clause was inserted in the Merchant Shipping Act by the British parliament at its last session, the effect of which, it is hoped, will frustrate any further fraudulent attempts to induce persons to proceed to Canada. It was not found possible, however, to obtain the necessary legislative enactment to prevent the embarkation of undesirable emigrants, who are debarred under the provisions of the Immigration Act from entering into Canada. Although the High Commissioner made strong efforts to have the necessary legislation brought about, it was considered that the matter could not be satisfactorily dealt with at that stage of the session. The matter will be taken up again as soon as opportunity offers, and every effort will be made to secure the desired legislation.

Attention is also called to the report of the Assistant Superintendent, who is in charge of the London office under the High Commissioner's supervision and of the various agencies in the British Isles and on the continent. Mr. Bruce Walker sets out fully the different changes in the administration of the work in the old country which were brought about as the result of your personal inquiry at the time of your visit to England during the course of the summer of last year. These changes, as well as the new arrangements which were then decided upon with a view to further stimulating the current of British emigration to Canada would appear to have had a direct effect both in the number and in the quality of the incoming British settlers during the present year, of whom 130,000, according to Mr. Walker's estimate, left for this country.

FRENCH AND BELGIAN IMMIGRATION.

Objection has been raised in some quarters with regard to the inefficiency of the work conducted by the department in these two countries, as it has been contended that the restrictive laws in force in most of the other continental countries of Europe did not apply to France or Belgium, and that in consequence greater efforts might very properly be made to secure a larger share of the agriculturists who annually emigrate from these countries. In this relation it may be stated that while it may be quite true that the anti-emigration laws in force in France and Belgium do not apply with the same stringency as those enacted in Russia, Germany and Austria-Hungary, or even in Norway, Sweden, Denmark and the Netherlands, these laws are such, however, that no open system of active propaganda would be countenanced. There is no doubt whatever that if the department were permitted to carry on the same immigration work in France and Belgium, or for that matter in any of the other continental countries mentioned, as it was our good fortune to prosecute without hindrance in the mother country and in the neighbouring republic, we would have no difficulty in selecting thousands of the most desirable settlers from Europe and directing them to our shores. But it is hardly necessary to state that the governments of France, Belgium or of any of the European countries would not under any circumstances tolerate the carrying out of a system of advertising through the channels of the public press, or by the simultaneous appeals of delegates sent out amongst the agricultural classes, in the very heart of the

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rural districts where our message would be more likely to meet with a favourable response. It has been necessary, therefore, to carry on our work in these countries with the greatest caution, and until some workable plan acceptable to the foreign governments concerned can be devised the department must be content to carry on its work in the most unostentatious way possible.

Nevertheless I am glad to be in a position to report that notwithstanding the fact that our efforts have been greatly restricted by the conditions above referred to, the results observed from our work in France and Belgium within the last five years have been very encouraging, as will be observed from the following statement:—

COMPARATIVE STATEMENT of Immigrant Arrivals from France and Belgium during the years 1897 to 1906, inclusive, and for the nine months ending March 31, 1907.

Year.	France and Belgium.
1897..	740
1898..	545
1899..	413
1900..	483
1901..	492
1902..	645
1903..	1,240
1904..	(1,534)—2,392—(858)
1905..	(1,743)—2,539—(796)
1906..	(1,648)—2,754—(1,106)
1907 (9 months)..	(1,314)—1,964—(650)

Total French and Belgian immigration from 1897 to 1902 (six years), 3,318.

Total French and Belgian immigration from 1903 to 1907 (four years and nine months), 10,889.

Special attention is called to the report of Mr. Paul Wiallard, the agent of the Canadian government in France, in which are set out fully the reasons which militate against an active propaganda in that country.

IMMIGRATION FROM THE UNITED STATES.

The number of arrivals from the United States during the nine months ending March 31, last, was 34,659, or an increase of nearly 2,000 over the previous corresponding nine months. The report of Mr. W. J. White, Inspector of Agencies and Press Agent, who is specially in charge of this work, sets out fully the facts connected with this branch of the service. As explained by Mr. White, the climatic conditions existing in the early part of the year were unfavourable to the displacement of prospective settlers, but notwithstanding this fact it is gratifying to note that this condition did not have a deterrent effect upon the immigration from the neighbouring States. The inspector also calls attention to the withdrawal by railway companies, as a result of the recent ruling of the Interstate Commerce Commission, of the low rate privileges

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heretofore accorded to settlers and homeseekers. This will mean that persons travelling over these railroads on their way to Canada will have to pay full fare. While this ruling will no doubt prevent a number of prospective settlers from carrying out their intention of moving to Canada, owing to the high rate of transportation, it will have the effect, as pointed out by Mr. White, of insuring the coming of bona fide settlers of more than ordinary means. Now that a permanent current of immigration has been established between Canada and the United States, the restrictive action of the Interstate Commerce Commission is, therefore, not without its compensation.

IMMIGRATION OFFICES IN WESTERN CANADA.

The report of the Commissioner of Immigration, who is the officer specially charged with the distribution of immigrants throughout the western provinces, will be found to contain very full and accurate information with regard to the new arrivals who passed through Winnipeg during the past year on their way to the agricultural fields, as well as to the existing conditions in the various districts to which settlers have been chiefly directed. The newly arrived settlers who have located upon free homestead lands are reported on the whole to be of the best farming class and quite content with the land of their adoption.

JUVENILE IMMIGRATION.

The report of Mr. G. Bogue Smart, Chief Inspector of British Immigrant Children and Receiving Homes, shows that there is an ever-increasing demand for British immigrant juveniles. This would seem to indicate that the deeply-rooted prejudice which at one time existed against this class of immigration has almost entirely disappeared. Mr. Smart, who has now been in charge of this work for over eight years, and who has, therefore, become very closely identified with the movement of juvenile immigration, is perhaps better qualified to speak authoritatively on the subject than any one else in Canada. From the conclusions which he has reached, based as they are upon his close observation of the thousands of cases that have come under his notice, and the individual reports of inspection made by the officers working under his supervision, the fact would appear to have now been demonstrated beyond any possible doubt that the juvenile immigrant, such as he comes to us to-day, after passing through the process of recruiting and careful selection in the receiving homes both in the old country and in Canada, and tutored as he is by the protecting action of the government inspector during his term of apprenticeship, is a desirable addition to our population. Extreme care is always exercised by the persons in charge of receiving homes in hiring out the children with farmers or residents of towns who apply for them, and with very few exceptions, which do not fail to come under the scrutiny of the inspectors, these juvenile immigrants soon become self-supporting and desirable members of the community.

MEDICAL INSPECTION SERVICE.

The report of Dr. P. H. Bryce, Chief Medical Inspector, will be found to contain very full and interesting statistics with regard to this important branch of the immigration service. The system of inspection in force at all Canadian ports of landing is

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giving entire satisfaction, and a careful reading of the chief inspector's report will not fail to show that if on the one hand strong efforts are being put forth to induce immigration to Canada, on the other hand, every reasonable precaution is being taken by the department to close the door against the entry of undesirables. No pains have been spared to render this inspection as strict and effectual as it has been possible to make it, and the results obtained should remove any prejudice or apprehension which might exist in this relation. The provisions of the Immigration Act, as regards undesirable immigrants, are being stringently enforced; settlers who have arrived in the country in such largely increased numbers during the past year, were, mentally, morally and physically, of the most desirable class, as evidenced by the absence of any complaints to the contrary, and when it is considered that of the 124,667 who came in during the nine months, over 90,000 were honest, healthy and intelligent Anglo-Saxons, and most of them possessed of considerable capital, it is sincerely to be hoped, in the interest of Canada, that we may be blessed for many years to come with the continuance of the infusion of the same elements in the life-blood of the nation.

SURVEYS.

During the nine months ending March 31, 1907, sixty-one parties were engaged on the survey of Dominion lands. Of these, ten were located in Manitoba, fourteen in Saskatchewan, nineteen in Alberta, six in British Columbia, one in the Northwest Territories and eleven were partly in one province and partly in another. One of the parties was engaged the whole time and five others part of the time, in the examination of surveys executed under contract.

The following table shows the distribution of parties paid by the day and of those working under contract:—

Parties.	In Manitoba.	In Saskatch- ewan.	In Alberta.	In British Columbia.	In the Terri- tories.	Partly in one Province and partly in another.	Total.
Paid by the day	4	8	8	5	1	9	35
Under contract	6	6	11	1	.....	2	26
Total	10	14	19	6	1	11	61

One hundred and sixteen whole townships and eleven fractional townships were completely subdivided, while ninety-three townships were partially subdivided. Also twenty-eight whole townships and one fractional township were completely resurveyed, while one hundred and ten townships were partially resurveyed.

In previous years the annual report has been for the twelve months corresponding to the fiscal year which ended June 30. Owing to the fact, however, that June 30 came in the middle of the survey season, and the difficulty of estimating the number of miles surveyed to that date, the statement of the mileage was made for the calendar year. The end of the fiscal year having been changed from June 30 to March 31, the survey season and the fiscal year correspond very well, and all survey operations will

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henceforth be referred to by fiscal years. The statement of mileage given below is, however, for fifteen months, from January 1, 1906, to March 31, 1907, the previous statement ending December 31, 1905. During this period, sixty-three parties were in the field. Owing to the nature of their work, the parties under Messrs. P. A. Carson, R. C. Laurie, J. A. Macdonell, J. W. McLaggan, A. D. Moodie, P. G. Stewart, W. Thibaudeau and A. O. Wheeler are not included in the statement of mileage. The total mileage of the other fifty-six parties was 17,064 miles, an average of 305 miles for each party.

During the past few years, a very marked improvement has taken place in the execution of the surveys of Dominion lands. Whereas the direction and lengths of the lines in the old surveys were often much in error, the reports of the inspectors show that the lines examined in the present day contracts are straight, that their direction is correct, that the chainage is good and that the corners are well marked. This change has been brought about by the use of improved instruments which not only enable the surveyor to run more perfect lines but permit of more accurate and more frequent observations, also by the introduction of the astronomical field tables and by the organization of a more careful and systematic method of inspection.

In order to meet the demand for township subdivision along the proposed railways north and west of Edmonton, the location of base lines through this country has been continued. This is a difficult undertaking owing to the distance from railway communication, and although a number of parties have been engaged on this work for several years, the progress has been slow.

In addition to the subdivision of new territory, the department is constantly being called upon to retrace and restore old lines. In surveys made twenty or thirty years ago, it is often found that the posts and mounds have entirely disappeared. Formerly, no mounds or pits were made in the woods, the corners being marked simply by wooden posts and bearing trees; these marks have frequently been destroyed by forest fires. When the lands are taken up, the new settlers naturally wish the corners to be properly marked so that they may know the limits of their lands. A number of survey parties are constantly engaged upon this work.

The correction of errors in old surveys is an important part of the surveyors' duties. The surveys of Dominion lands have not always been made with the same care and precision as they now are. Townships were subdivided by contract as at present, but the system of inspection was neither as thorough nor as systematic, and bad surveys occasionally escaped detection. Generally, several settlers are interested in any correction. Those who benefit by the change are in favour of it, while those who lose by it wish the old survey to stand. It is very difficult to settle such cases satisfactorily to all parties.

A few surveys were made at remote places. Settlement surveys were commenced at The Pas, Cumberland House and Big Eddy on Saskatchewan river. Parts of several townships were subdivided west of Lesser Slave lake beyond the limits of the old settlement. Settlements were also laid out at North Vermilion, Fort Vermilion and Boyer settlements on Peace river.

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Mr. P. A. Carson, who is in charge of the trigonometrical survey, continued the triangulation of the railway belt in British Columbia. This work is for the purpose of establishing convenient and permanent reference points from which subdivision and other surveys may be started.

Four parties, under Messrs. P. G. Stewart, A. D. Moodie, W. Thibaudeau and J. W. McLaggan, explored the country along the route of the proposed branch of the Canadian Northern railway between Erwood, a station on the railway, and Fort Churchill, on Hudson bay. This proposed branch is to pass through The Pas, and that part between Erwood and The Pas is now under construction. The parties under Messrs. P. G. Stewart and A. D. Moodie were at work between Erwood and The Pas, Mr. Stewart exploring the western portion and Mr. Moodie the eastern portion of this tract. The party under Mr. W. Thibaudeau examined the country lying between Fort Churchill on Hudson bay and The Pas on the Saskatchewan river, while Mr. J. W. McLaggan's party traversed the region between The Pas, Paint lake and Burntwood river. The object of these explorations was to obtain definite information as to the general character of the country, the nature of the soil, its fitness for agriculture, the value, quantity and location of the timber, the mineral resources and the climate. Maps showing the surveys of Messrs. Stewart, Moodie and McLaggan, are being published with the report of the Surveyor General.

Mr. A. O. Wheeler, topographer of the department, was engaged on a phototopographical survey of the country between Mts. Douglas and Drummond, near the Red Deer river, and the Beaverfoot range. The work in the main range of the Rocky mountains has now been completed westerly as far as Columbia river at Golden. In order, however, to connect with the survey of the Selkirk range from Beavermouth to Revelstoke, a survey of the Spillimacheen mountains and the Dog-Tooth range, lying between Columbia and Beaver rivers south of the railway, has still to be made. It is proposed to make the connection this coming season.

Surveys in the Yukon Territory were, as heretofore, under the supervision of the Director of Surveys at Dawson. The surveys of thirteen group lots were confirmed during the nine months ending March 31, 1907. In addition to these, a reference traverse was made from the British Columbia boundary at Windy Arm to Carcross at Caribou Crossing.

Irrigation surveys were continued under the direction of Mr. John Stewart, D.L.S., Commissioner of Irrigation.

The operations in 1907, will be on a somewhat larger scale than in 1906. It is expected that about two hundred and fifty (250) townships will be subdivided.

The fifth meridian is to be produced north from the twentieth base line to Peace river, a distance of about two hundred and ten (210) miles. On this line will depend the subdivision of all that vast tract of country north of the twentieth base line and west of the fifth meridian; consequently the work is one of great importance. Mr. A. W. Ponton, who is to have charge of the survey, has been asked to pay particular

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attention to the character of the country within twelve miles on each side of the meridian, so that he may be able to report fully on the nature of the soil, the timber and mineral resources, &c. He is also to indicate the places suitable for settlement, where subdivision surveys are needed.

Mr. J. N. Wallace, D.L.S., is to resume the survey of that part of the sixtieth parallel of latitude which forms the boundary between British Columbia and the Yukon Territory. Mr. George White-Fraser, D.T.S., in 1899 and 1900, fixed the position of this parallel at various points from Teslin lake to the Alsek river. Mr. A. Saint Cyr, D.L.S., joined these points, by a trial line and a series of monuments, from Teslin lake westward to Takhini river. Mr. Wallace is to offset the monuments to the true line between Windy Arm and Lake Bennett, and to complete the work from the Takhini river to the Alsek river.

The office work at headquarters has been greatly hindered by the number of changes that have taken place in the office staff. From the beginning of 1905 to date, sixty-one employees have resigned or have been transferred to other offices, and untrained men have taken their places. Under such conditions, efficient administration is an impossibility.

The business of the lithographic office was conducted in the same manner as in previous years. No change has been made either in the staff or in the processes. There was a decrease in the number of maps printed, but a decided increase in the number of township plans.

In the photographic office the total amount of work executed during the nine months exceeded that executed during the previous twelve months. This was due in part to the increased use of photography in the survey work of the Geological Survey Department. Considerable time was spent on special work such as the preparation of maps of the northern territories on a scale of twelve miles to an inch.

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Hereunder is the usual table of subdivision or settlement survey work completed each year since the inception of the surveys, with the result of last season's operations added:—

Period.	Acres.	Number of Farms of 160 acres each.
Previous to June, 1873	4,792,292	29,952
1874	4,237,864	26,487
1875	665,000	4,156
1876	420,507	2,628
1877	231,691	1,448
1878	306,936	1,918
1879	1,130,482	7,066
1880	4,472,000	27,950
1881	8,147,000	50,919
1882	10,186,000	63,662
1883	27,234,000	170,212
1884	6,435,000	40,218
1885	391,680	2,446
1886	1,379,010	8,620
1887	643,710	4,023
1888	1,131,840	7,074
1889	516,968	3,231
1890	817,075	5,106
1891	76,560	476
1892	1,395,200	8,720
1893	2,928,640	18,304
1894	300,240	1,876
1895	406,240	2,539
1896	506,560	3,166
1897	428,640	2,679
1898	859,840	5,374
1899	1,022,720	6,392
1900 (first 6 months).....	735,480	4,596
1900-1901	1,603,680	10,023
1901-1902	2,553,120	15,957
1902-1903	6,173,440	38,584
1903-1904	12,709,600	79,435
1904-1905	10,671,520	66,697
1905-1906	4,973,920	31,087
1906-1907 (9 months).....	3,819,700	23,873
	124,304,155	776,896

INTERNATIONAL BOUNDARY SURVEYS.

Last year a determination of longitude near the point where the 141st meridian crosses the Yukon river was made under the direction of the commissioners under the treaty providing for the survey of that meridian. Early this spring surveyors were sent to this point to measure the computed distance from the observation pier to the 141st meridian, and to lay down, by observation, the exact direction of the latter, in readiness for the line surveyors who will produce the meridian north and south from the initial point. Mr. A. J. Brabazon, D.L.S., and Mr. Baldwin, of the United States Coast and Geodetic Survey, are the surveyors in charge of the field work. It is intended to produce the line southward at first, and as rapidly as possible, as an accurate determination of the boundary line is required near the head of White river. Besides the surveying and marking of the line, a topographical survey, based upon a triangulation, and extending two miles on each side of the meridian, is to be made.

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The demarcation of the boundary of the Alaska Coast Strip is being continued. Messrs. J. D. Craig, W. F. Ratz and D. H. Nelles, Dominion land surveyors, are carrying on the Canadian share of the work.

The survey of the 49th parallel, Mr. J. J. McArthur, D.L.S., in charge, is being continued. The part of this parallel which lies west of the summit of the Rocky mountains is almost completed, but a few miles of the rough country on the western slopes of the Cascades mountains remaining.

Arrangements have been made by the commissioners, Messrs. W. F. King and O. H. Tittmann and Dr. C. D. Walcott, for a joint final inspection this summer of the completed portions of the line.

The survey of the eastern section of the boundary line between the St. Croix and the Richelieu rivers, under Mr. G. C. Rainboth, D.L.S., and Mr. J. B. Baylor, of the United States Coast and Geodetic Survey, is being continued. Operations, including resurvey and the placing of new monuments, were begun last year from the north-eastern angle of the state of Vermont, westwardly. It is expected that the line will be completed to the Richelieu river this season.

Reconnaissance for the trigonometrical survey of Canada was carried on during the winter over the southern part of the province of Quebec to near the New Hampshire boundary. The erection of observing stations was resumed in the spring, and the observation of the angles is now being proceeded with. Fuller details of these surveys will be found in the report of the Chief Astronomer and Boundary Commissioner, together with an account of the work done in the Dominion Astronomical Observatory.

SCHOOL LANDS.

In view of the number of inquiries received in regard to Manitoba school lands, it was considered that it would be in the interest of the School Lands Endowment Fund to offer at public auction during the autumn of 1906, the undisposed of school lands in the southwestern part of the province. The lands it was decided to offer were situated, approximately, in the portion of the province lying west of range 15 and south of township 19, with the exception of two small sales held at Winnipeg and Roseisle. The sales were held at the following points between September 11 and November 24. last, namely: Winnipeg, Roseisle, Killarney, Deloraine, Melita, Hartney, Reston, Brandon, Wawanesa, Virden, Miniota, Oak River, Strathclair, Birtle, Minnedosa and Rapid City.

The results of the sales were most satisfactory, 125,086.98 acres having been sold for \$1,526,546.35, or an average price of \$12.20 per acre.

The summary of each of these sales will be found in the report of the chief clerk of school lands.

An auction sale was also held at Strassburg, in Saskatchewan, at which 11,801.40 acres were sold for \$173,175.15, or an average price of \$14.67 per acre.

No auction sales of school lands were held in Alberta, as extensive sales took place in that province during the previous year.

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The total net revenue from the school lands for the three provinces for the nine months ending April 1, 1907, was \$721,864.88, as against \$607,070.13 for the previous twelve months.

Classified statements of the revenue from the three provinces for the fiscal period, as well as statements showing the balance to the credit of the school lands fund of each province will be found accompanying the report of the chief clerk of school lands.

In accordance with the provisions of the orders in council in that behalf, the revenue, other than principal moneys of sales, collected from the school lands in the provinces of Manitoba, Alberta and Saskatchewan during the fiscal period, less the cost of management, was paid over to the respective governments of these provinces, the amount paid in each case being as follows:—

Manitoba.	\$39,572 70
Saskatchewan.	45,609 78
Alberta.	50,235 88

The above is in addition to the interest accruing on the school lands fund of each province, which is paid over by the Finance Department.

The balance standing to the credit of each province on March 31, 1907, was as follows:—

Manitoba.	\$1,640,689 76
Saskatchewan.	579,438 39
Alberta.	298,973 40

These balances are made up entirely of the principal moneys of sales, as everything in the shape of interest, rental, &c., has been, as already stated, paid over annually to the governments of the three provinces.

THE YUKON TERRITORY.

The report of the Acting Commissioner of the Yukon Territory will be found under Part VII. of the general report.

It may be stated here that on June 17, last, Mr. Alexander Henderson was appointed Commissioner of the Territory in the place of Mr. W. W. B. McInnes, who had some time previously resigned the position. Mr. Henderson, who for many years before his appointment had been a member of the Bar of British Columbia, and who exercised his profession in the city of Vancouver with much distinction, would appear to be fully possessed of the necessary administrative ability to enable him to discharge satisfactorily the important duties attaching to his new office.

The reports of Mr. J. T. Lithgow, the Acting Commissioner, and of the other chief officers in charge of the various branches of the Yukon administration, are highly satisfactory, and will no doubt be read with much interest. There would appear to be no doubt that with the installation of the powerful hydraulic plants which have been under way for some time, the production of the gold-bearing districts, which have heretofore been worked by individual mining, will be largely increased. The renewed activity in mining operations, as evidenced by the increase in the receipt of mining dues, notwithstanding the fact that there has been a falling off in the total output,

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would appear to fully warrant the optimistic views entertained by the Acting Commissioner as to the future of the Territory.

I wish to call attention also to the supplementary report from the Acting Commissioner, dated November 22, last, on the agricultural production of the Yukon Territory. From the statements contained in the reports of both Mr. Lithgow and Mr. Gosselin, the fact seems to have been conclusively established that in so far as agricultural and farming products are concerned the territory may be safely considered as self-sustaining in this relation. When the high latitude of the Yukon Territory is borne in mind, as compared with the rest of the Dominion of Canada, it will be a source of much surprise to the outside world to realize that even in those far-off and out of the way northern regions the agricultural capabilities of the district are such as to render the large mining population residing there fully independent of outside production for sustenance. This also will further demonstrate that the large areas of virgin land lying along the Athabaska and Peace rivers, much more to the south and much easier of access than the Yukon Territory, contain farming and agricultural possibilities of a magnitude which an inadequate knowledge of the country does not permit us to fully appreciate.

ROCKY MOUNTAINS PARK OF CANADA.

The report of the superintendent of the park will be found under Part VI. of the general report.

The returns submitted are highly satisfactory, and it is gratifying to observe that the national park continues to grow in public favour, as the most attractive resort on the continent for both the tourist and the health-seeker.

It is satisfactory to note also that there has been a substantial increase in the revenue derived from the park during the past year, and the suggestion of the superintendent that this would seem to warrant a still larger expenditure in opening up new sources of interest and attraction, would appear to be justified.

THE PABLO HERD OF BUFFALO.

Representations having been made to the department early last spring that Mr. Michel Pablo, of Missoula, Montana, was offering for sale the immense herd of pure-bred buffalo in his possession, negotiations were entered into which resulted in the purchase of the animals, a special appropriation having been made by parliament at its last session to meet this expenditure.

The first shipment of the buffalo was made in the month of June, last, under the supervision of Mr. Howard Douglas, Superintendent of the Rocky Mountains Park. The animals, two hundred in number, were safely delivered at Lamont station, west of Edmonton, on the line of the Canadian Northern railway, and from thence driven to the Elk Park, which had been specially prepared for their reception. The balance of the herd, which is estimated to number three hundred animals, will be shipped to the park in the month of September, as it is chiefly composed of cows and calves, and it was felt that these animals would be in better condition to stand the hardships of the journey at a later date.

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As this transaction was made after the close of the past fiscal year to which the general report of the department now submitted particularly relates, full particulars with regard to the matter will be embodied in next year's report, but it may be stated here that Canada was singularly fortunate in securing this herd of buffalo, which is the largest one in existence to-day on the continent of North America. In this relation I deem it advisable to quote in full the able article which appeared in the *Daily Missoulan*, of May 29, last, one of the leading newspapers of the state of Montana. The article is most interesting, as it contains historical data respecting Mr. Pablo's remarkable herd, and from the general tone of the narration one cannot help realizing that what, unfortunately, is the loss of the neighbouring republic is Canada's gain.

'Ravalli, the sleepy little village that skirts the foot of the bluffs that rise along the narrow canyon through which the Jocko river finds its way westward to the Pend d'Oreille, is stirred this week from its accustomed quiet. It is thoroughly busy. The scenes that transpire there have never been duplicated in the world; in all probability they will never be repeated. Five hundred head of buffalo are being loaded into heavy stock cars for transportation to Canada, where they are to be placed by the Dominion government upon a special reservation, there to be carefully protected that their species, if possible, may be saved from utter extermination.

' Historic Ground.

'Many historic scenes have been enacted along the Jocko river and in the shadow of the gray bluffs that now look down upon the stirring scenes of this week. Indian councils were wont to gather there long years ago, before the white man had set foot upon this mountain region. Along its banks and through its fords journeyed slowly the black-robed Jesuit missionaries who brought to the Selish Indians the Gospel of Peace. Later, over this same trail, trod the gold-seeker and the trapper. Along this stream, in succeeding years, moved the vanguard of the railway engineers seeking a route for the line of steel whose slender web should bind the balmy shores of the Pacific to the bustling coast of the Atlantic, and here were enacted some of their most hazardous exploits. And here, again, in more recent years, did travellers leave the train for their journey northward to the fabulously fertile plains and valleys beyond.

' Behind the Bluffs.

'For many years missionary and trapper and gold-seeker journeyed along this stream, little realizing the great extent of the wonderful region that lay back of the gray, forbidding bluffs, until one day an Indian told the priests of the Mission valley and led them through the clay-banked coulee that opens back of what is now Ravalli station, named in memory of one of those same holy men. Down that coulee yesterday, out of that peaceful valley, rumbled the largest herd of bison in the world: down the narrow draw to the outward side of the cliffs they came at their awkward pace, their hoofs treading for the last time upon American soil, for when they leave the cars into which they are being loaded they will be under the union jack. They are lost for ever to America, in whose possession they should have remained at any price.

' Vale Buffalo.

'But these creatures have been sold and there's no use crying over spilt milk. Yesterday the work of loading them was continued and last night it was announced that the train will leave Ravalli to-morrow forenoon. It will go to Helena over the Northern Pacific, and then over the Great Northern and the Canada Northern. The famous herd which was collected with so much pains and at so great expense by the late Charles Allard will be lost to America and will become the property of our northern neighbour, whose enterprise and progress have out-Yankeed the Yankees more than

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once in recent years. The herd is known the world over as the largest collection of bison extant. It was estimated that the Canadian government would receive about 400 of the animals, but now that they have been rounded up it is found that there will be nearer 500 in the trainload that will be sent north to-morrow.

' A Famous Herd.

'The history of the herd is too well known to call for repetition here. From a small beginning in the 80's, Mr. Allard developed it, by breeding and purchase, to upward of 100 head in 1893, when he bought the famous Buffalo Jones herd from Kansas, and brought the animals, full bloods and half-breeds, to the reservation in the early autumn of that year. The cross breeding of cattle and buffalo was soon abandoned as impracticable, as the "catalo" was neither one nor the other, and seemed to possess all of the poor qualities and few of the good qualities of either. The cross-breeds were accordingly separated from the bison and the latter were placed on a range near the Big Butte, near where Mud creek empties into the Pend d'Oreille river. On this broad plain the animals multiplied and they seldom left their range. Very little herding was required.

' Early Sales.

'When Mr. Allard died, his partner, Michel Pablo, began to sell the herd, a few at a time, and most of the best specimens of bison in eastern zoological gardens and private preserves in the east come from this herd. Probably 150 head have been sold in this way. Howard Eaton, the well known hunter and expert of Wolf, Wyo., acted as sales agent in most of these instances. When the prospective opening of the Flat-head reservation foretold the destruction of the free range that the animals had enjoyed, and made it evidently impossible to preserve the herd intact, Mr. Pablo naturally turned to Mr. Eaton for assistance in disposing of his valuable band. Mr. Eaton made earnest attempts to bring about the sale of the herd to the United States government, but for some reason that is not clear to anybody his efforts were unsuccessful. Nor could he interest the American Bison Association in the matter to the extent of raising the funds necessary to purchase the herd. So, when all attempts had failed in this line, the offer of the Dominion government was accepted, and for a smaller sum than \$150,000 Canada becomes the owner of the largest herd of bison in the world.

' Too Late.

'But it is useless to grieve over the matter. It is settled and settled finally, and while it is regrettable that the settlement is as it is, there is none the less interest in the scenes attendant upon the loading of the unwieldy animals at Ravalli, and the work is being watched with deep interest by many visitors who have been attracted to the spot. In addition to the contract price of the herd, Mr. Pablo made a deal for loading the animals. For this work he receives \$5,000; but there will be little profit in the job, for it is tedious and expensive. Thirty-five men are engaged in the work and it keeps them all busy.

' Driving In.

'The animals have been herded enough on their reservation to become familiar with mounted men, and the drive down the Mission valley to the railway is accomplished without much difficulty. They shy a little at the coulee after the climb up the hill from the valley, but the herders press them on, and before they know it they are plunging down the narrow draw to the Jocko. The Indian riders handle the animals with wonderful skill, and it is not until the corrals are reached that any serious trouble is experienced.

' At the Corrals.

'But at the sight of these loading pens the big beasts attempt to back away. Their speed, however, has been checked, and they can not run over the line of horsemen that

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is drawn close around them. Gradually they are worked into the big pens as they are wanted for loading, and when they are once in these corrals the real trouble of loading begins. The pens are built as strong as they can be made. Previous experience with these creatures has taught the necessity of this. The first buffalo that were driven to Ravalli for loading, a few years ago, walked through the high inclosing fence as if it had been made of straws; yet it was built for rough cattle.

'In the Pens.

'Once in the main pen the animals are cut out, one by one, and run into the loading pen. They are wild and by this time angry. A few pawings at the earth, a toss of the mighty head and the imprisoned bull looks around him. A narrow gate is open and it seems to him to lead to liberty. Through the opening he dashes, the gate swings shut behind him and he is in the chute that leads to the car.

Perched on a running board along the chute is a big Indian with his lariat loop swung wide open. As the buffalo lunges forward below him, he drops the noose over the angry head. A turn around a snubbing post and the noose is tightened and the animal is held fast, bars are thrust across the chute behind him so he can not back out; then he is under control and is eased into the car.

'Loaded.

'Once in the car he is given hay and water and made to feel as much at home as possible, but the temper of a buffalo bull is sullen and his imagination is not keen enough to make dry hay in a stock car resemble in any way the sweet grass on the Mud creek prairie.

'The cows, as a rule, are more easily handled than the bulls, unless they have calves at their sides. In that case they will fight for their babies. But the cows are handled by themselves and are generally loaded without much trouble. There have been a few vixens among them, however, that have fought as stubbornly as the worst bull in the band, and have kept the herders on the jump.

'Not so Easy.

'All this sounds easy when you read about it. But it is slow and vexatious work in reality. When the first day of loading was finished there were 16 buffalo in the cars, and the herders wondered if they had struck a summer's job. However, the next day the work was easier, and since then the loading has progressed more rapidly. To get a good idea of the difficulties that attend this work, take the most "ornery" range steer that ever stood on hoof, multiply his meanness by 10, his stubbornness by 15, his strength by 40, his endurance by 50 and then add the products; you will then have some conception of the patience and skill that are required to load a buffalo into a stock car.

'One Accident.

'The loading has been accomplished with but one serious accident. One bull so injured himself that it was necessary to kill him. In an incredibly short time the carcass was skinned, the meat distributed among the Indians and the head and robe packed away for presentation. That taste of buffalo meat whetted the Indians' appetite, and after that their look at each buffalo that passed through the chute was like the longing gaze of a coloured watermelon tosser as he sees a particularly fine piece of fruit come down the line and is tempted to drop and break it. But a buffalo costs more than a watermelon and the Indian is less emotional than the negro, so no more buffalo legs were broken.

'There have been some amusing incidents in connection with the loading. One morning a new car had been pushed in front of the chute, and a number of spectators,

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among them some Missoula people, seized upon the roof of that car as a good vantage point. They climbed up and watched with interest the preliminaries of loading. Then the first bull came up the chute. In some way, perhaps intentionally, the lariat slipped around the snubbing post and the bull entered the car under pretty good headway. He hit the back side of the car with an impact that shook the very rails and rattled the spectators on the roof in more ways than one. Some of them didn't wait to climb down the ladders; they just jumped.

'The train with its strange load will probably pass through Missoula to-morrow afternoon. It will be the quaintest trainload that ever passed this way, and it will no doubt attract much attention.

'Mr. Pablo will retain a few of the herd, probably a couple of bulls and a dozen cows, but the great herd will be gone, and Americans, who should have retained possession of the bunch, will witness the passing of the most characteristically American animal of all our western fauna. It is too bad, but it can not be helped now.

'Representing the Dominion government at the loading are: Superintendent Douglas, of the Canadian National Park at Banff; M. Ayotte, who negotiated the purchase of the herd; Dr. David Warnock, Dominion Veterinarian, and General Freight Agent McMullen, of the Canadian Pacific railway.'

FORESTRY.

The report of the Superintendent of Forestry will be found under Part IX. of the general report. The general result of the work of this branch has been quite satisfactory, and it is gratifying to note that the demand for seedlings and trees from settlers throughout the west has increased from a little over 50,000 in 1899, to nearly 2,000,000 during the present year. This is clearly the best indication that the success achieved by those who some years ago took advantage of the gratuitous assistance in this relation afforded by the government has acted as a strong incentive to others to follow in the same experiments. The suggestion of the superintendent as to the advisability of further perfecting the organization for the proper care and maintenance of the permanent forest reserves is timely, and it is, therefore, proposed to take whatever action may be found necessary in this regard.

The same remark applies with reference to timber generally. There is no doubt that in view of the rapid development of the country and the consequent demand for timber, both for fuel and construction purposes, proper methods will have to be devised by which the department may ascertain definitely the value and extent of the various timber areas within the boundaries of the western provinces still under Dominion control. To attain this end it would be necessary to extend the scope of our present system of inspection, but the matter is one of such vital interest from a public point of view that the increased expenditure involved would be fully justified.

I desire to call particular attention to the report to be found at the end of Part IX., by Mr. E. Stewart, late Superintendent of Forestry, of his exploratory trip up the Mackenzie and down the Yukon rivers.

It must be borne in mind that Mr. Stewart's trip was, as is the case with regard to almost all exploratory information relating to that portion of the Dominion, confined entirely to the routes traversable by way of the rivers,—rivers whose magnificent breadth and grandeur of scenery are not surpassed, if equalled, by those of the eastern

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portion of the Dominion,—so that what is known from the information obtained through a trip of this nature can be estimated as only a percentage of what the resources of that land really may be.

Mr. Stewart outlines one or two suggestions which may well merit consideration. One is for extended and careful exploration for gathering precise information as to the actual timber resources, not only of the districts lying immediately alongside of the rivers, but inland from their waters. Another suggestive point which Mr. Stewart makes is that the distance from the east end of Lake Athabaska to Fort Churchill on the Hudson bay is less than 500 miles,—a mileage of no great magnitude in these days of rapid railway construction,—and that a railroad between these two points would afford an outlet for the trade of an immense district of country over a route which would be vastly shorter than that by the St. Lawrence.

I have the honour to be, sir,

Your obedient servant,

W. W. CORY,

Deputy of the Minister of the Interior.

PART I.

DOMINION LANDS.

DOMINION LANDS.

No. 1.

REPORT OF THE COMMISSIONER OF DOMINION LANDS.

DEPARTMENT OF THE INTERIOR,

OTTAWA, June 21, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I beg to submit my report for the nine months ending March 31, 1907, on the Dominion Lands Branch of this department, together with the reports of the Inspector of Dominion Land Agencies and the Agents of Dominion Lands for the several districts.

A summary statement has been prepared of the work transacted during the period mentioned as compared with the corresponding nine months during the previous year.

STATEMENT of work for nine months ending March 31, 1907.

	1906.	1907, to March 31.
Files dealt with.	83,058	119,459
Letters written.....	63,107	90,934
Triplicates.....	26,920	59,652
Total letters.....	90,027	150,586
Applications for patent—		
Number examined	11,027	15,426
New applications.....	7,431	11,305
Certificates issued.....	6,684	10,647

The question of accommodation for the staff is still pressing, and additional space is urgently required, particularly in view of the necessity for increasing the numerical strength of the staff.

I have the honour to be, sir,

Your obedient servant,

J. W. GREENWAY,

Commissioner of Dominion Lands.

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No. 2.

REPORT OF THE INSPECTOR OF AGENCIES.

OFFICE OF INSPECTOR OF DOMINION LANDS AGENCIES,
BRANDON, MANITOBA, April 15, 1907.

J. W. GREENWAY, Esq.,
Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I beg to submit my report for the amended departmental year, July 1, 1906, to March 31, 1907.

It is pleasing to again report very great progress in the development of the western provinces. The rush of immigration keeps up. The crop of 1906 was very satisfactory, and capital seeking investment is steadily increasing. The newly settled districts are rapidly being brought under cultivation and a general feeling of independence and prosperity is apparent.

The work in most of the land offices has materially increased.

The change in the termination of the departmental year, from June 30 to March 31, cuts off the three busiest months of the year and makes it difficult to give comparative figures in regard to the work. I have endeavoured, however, to give correct comparisons with the same nine months of the preceding year.

SPECIAL INSPECTION WORK.

It having developed that a number of land dealers, who might be more properly called 'land sharks,' were endeavouring to manipulate desirable homestead lands for personal gain, a campaign of special inspection work was inaugurated in April, 1906, which was to cover the land districts of Alameda, Regina, Yorkton and Battleford. This work entailed an inspection and report by the homestead inspectors of each quarter section of land for which entry had been granted prior to September 1, 1905, and not yet patented. In my report of 1906 I gave a statement of what had been completed in that work to June 30, 1906. The following is an additional statement of the inspections reported for each district and the summary cancellations made since July 1, 1906:—

Agency.	Inspections. Cancellations.	
Alameda..	1,608	23
Battleford..	3,098	157
Regina..	8,983	364
Yorkton..	3,550	283

I may add that this special inspection entailed an enormous amount of work upon the homestead inspectors and a very great amount of additional work at the land offices. Its accomplishment, however, has made available a great amount of land for re-entry and given the public assurance that the department will not tolerate any interference with or manipulation of free grant lands held for *bona fide* settlers.

INSPECTION OF OFFICES.

The land offices and a number of the sub-land offices have been inspected during the past fiscal year and my reports have been made to you upon the same, from time

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to time, as the inspections were made. I have almost invariably found the books and records in the land offices well kept and in order. In addition to regular inspection of offices my time has been largely given to visiting offices as frequently as possible and keeping a close supervision of all the work.

It was found impossible to visit and check-up the offices of the sub-agents as often as desirable, but I have recently been given an assistant, Mr. J. W. Martin, formerly Dominion Lands Agent at Lethbridge, who will chiefly attend to this work.

NEW LAND DISTRICTS.

During the year two new land districts have been organized, Humboldt and Moosejaw. The former was opened for the transaction of business October 15, 1906, and the latter March 25, 1907. This occasioned much extra work in the transcribing and separation of records before commencing work in the new offices.

On September 30, 1906, the office for the Minnedosa district was closed and the entire district was merged into the Dauphin district. All books, records, &c., were transferred to the Dauphin office. There are at the present time sixteen land districts in the provinces of Manitoba, Saskatchewan, Alberta and British Columbia.

During the year two new sub-agencies have been established Herbert, Saskatchewan, and Vermilion, Alberta. Three sub-agencies have been extinguished, Humboldt, Moosejaw and Estevan. The sub-agencies at the present time number 57.

During the year I have travelled by rail and boat 29,697 miles, and by team 625 miles, making a total for nine months of 30,322 miles.

I beg to attach herewith statements as follows:—

‘A.’—Dominion Land Agencies, principal business transacted.

‘B.’—Sub-agents, principal business transacted.

‘C.’—Homestead Inspectors, principal work performed.

I have the honour to be, sir,

Your obedient servant,

R. E. A. LEECH,

Inspector of Dominion Lands Agencies.

7-8 EDWARD VII., A. 1908

A.—DOMINION LANDS AGENCIES, principal transactions for the period from July 1, 1906, to March 31, 1907.

Agencies.	Homestead Entries granted.	Land Sales.	Applications for Patent received.	Timber Permits Issued.	Hay Permits issued.	LETTERS.		REVENUE.		No. of Staff.	EXPENDITURE.	
						Received.	Sent.	Scrip.	Total Scrip and Cash.		Salary.	Con-tingencies.
Alameda	1,115	7	1,240	8	44	12,854	10,261	\$ cts.	\$ cts.	4	\$ cts.	\$ cts.
Battleford	3,213	21	551	130	39	22,335	15,000	.....	15,973 10	9	2,621 66	718 80
Brandon	84	23	515	195	2	5,475	4,448	.....	44,765 96	9	5,198 30	938 04
Calgary	973	70	1,007	687	47	28,861	19,011	1,200 00	17,758 13	8	2,595 64	148 82
Dauphin	357	16	325	662	44	7,824	5,227	.....	62,466 37	9	6,026 60	704 40
Edmonton	2,766	89	1,250	1,228	49	22,437	22,189	.....	11,948 10	3	2,069 94	918 42
Humboldt	752	2	371	108	.....	10,081	6,483	.....	82,325 72	av. 13	8,003 26	1,769 80
Kamloops	46	77	25	.....	2	2,531	2,427	.....	8,430 10	5	1,436 30	976 77
Leithbridge	1,418	135	507	276	73	18,035	14,855	.....	12,445 83	3	2,111 69	105 51
Moosejaw	57	.....	11	1	.....	611	192	.....	42,081 89	5	3,036 62	1,046 57
Minnedosa	54	4	28	.....	35	1,038	689	.....	598 30	16	355 53	60 64
New Westminster	29	21	.....	.....	.....	1,938	689	.....	2,019 33	2	549 99	37 79
Prince Albert	1,001	23	578	1,073	.....	1,551	1,248	.....	6,540 14	1	1,049 94	199 90
Red Deer	1,693	15	636	420	13	8,132	7,041	654 54	40,631 35	5	3,117 16	484 25
Regina	5,672	70	2,382	803	77	12,901	10,091	.....	22,084 15	av. 28	2,436 61	1,833 09
Winnipeg	737	51	337	632	79	51,196	47,200	245 25	81,908 38	14	14,654 92	2,013 84
Yorkton	1,721	69	1,343	717	13	13,101	10,381	800 00	61,692 30	8	11,025 00	2,500 18
						34,463	22,289	.....	33,025 55	14	5,463 57	468 63
	21,687	693	11,109	6,940	529	253,366	199,632	2,909 79	549,325 40	132	72,852 46	14,925 45
Compared with corresponding nine months in the year 1906	25,781	843	7,585	8,388	562	233,807	210,063	3,936 65	440,025 99	103	51,901 64	10,013 62

R. E. A. LEECH,
Inspector of Dominion Lands Agencies.

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B.—DOMINION LANDS Sub-Agencies, principal work performed during the period from July 1, 1906, to March 31, 1907.

Name.	Place.	Applications for Homestead Lots taken.	Applications for Patent taken.	Applications for Timber Permits taken.	Applications for Hay Permits taken.	Amount remitted to Land Office.	Salary.	Expenses, Postage, Exchange, and Commission.	Remarks.
						\$ cts.	\$ cts.	\$ cts.	
Baetz, Geo. O.	Ft. Saskatchewan, Alta.	87	17	92	35	1,310 82	225 00	13 51	(2 months, July and August, September to November 8, 1906. Appointed Nov. 23, 1906.
Bailey, C. H.	Estevan, Sask.	174	221		15	2,680 00	225 00	22 08	Appointed January 23, 1907.
Duncan, L. A.	Canora, Sask.	365	127	159	11	3,762 00	250 00	30 91	None given.
Barschell, J. F. P.	Dubuac, Sask.	40	163		11	451 90	225 00	8 28	Paid by commission.
Bobier, J. S.	Vermilion, Alta.	44	4		4	581 00	50 00	4 01	
Bowtell, Harry	Millstone, Sask.	68	122		13	1,043 60	225 00	12 21	
Bunn, John R.	Sprague, Man.	49			1	401 50			
Caldwell, J. W.	Saddle Lake, Alta.	127	18	37	7	1,339 75	135 00	4 63	
Cochran, L. B.	Medicine Hat, Alta.	298	71	192	9	4,769 48	675 00	44 05	
Cook, Robert H.	Arcola, Sask.	105	292	135	25	1,190 50	225 00	21 37	
Cox, Arthur Edgar.	Pincher Creek, Alta.	124	73	42	1	4,124 62	225 00	20 87	
Dubois, M. J.	Duck Lake, Sask.	62	69	59	11	1,069 70	225 00	9 30	
Edgson, John A.	Edison, Alta.	39	11	79	1	501 31	225 00	4 63	
Elton, D. H.	Cardston, Alta.	22	9	18		317 90	225 00	4 11	
English, J. J.	Maple Creek, Alta.	162	14	16	9	1,789 00	375 00	15 97	
Flannan, Geo.	Lloydminster, Sask.	621	124	17	8	7,259 25	450 00	38 33	
Goodwin, A. H.	Vegreville, Alta.	235	138	29	10	2,481 90	225 00	19 12	
Gray, W. B.	Stettler, Alta.	530	174	63	37	5,397 55	300 00	41 17	
Gregory, J. A.	N. Battleford, Sask.	179	113	30	17	2,062 30	300 00	8 90	
Gunn, Peter	Lac Ste. Anne, Alta.	28	3	7	13	324 00	225 00	2 78	
Gwynn, J.	Kitawia, Sask.	119	4	34	5	1,305 25	285 00	10 20	
Harley, Hugh	Swan River, Man.	119	43	229	45	2,553 70	225 00	18 35	
Holmes, W. E. G.	High River, Alta.	62	100	96	6	3,411 24	225 00	17 06	
Hanser, H. I.	Humboldt, Sask.	352	95	1	6	4,901 65	174 20	21 35	Office closed October 15, 1906. Resigned July 1906.
Lapointe, Joseph.	Willow Bunch, Sask.	89	3	5		791 25	250 00	3 73	Appointed August 21, 1906.
Lapointe, Prudent.	Imperial, Alta.	125	81	99	11	1,819 70	450 00	11 22	
Malcolm, H. A.	Swift Current, Sask.	551	16	42	34	6,179 35	355 00	40 46	
Milburn, William.	Olds, Alta.	330	127	67	18	3,962 20	450 00	28 71	
Moore, O. S.	Kamloops, B.C.	2	5	24		468 00		6 99	Asst.-Crown Timber Agent.
McDonald, D. J.	Davidson, Sask.	459	63	29		5,296 25	350 00	32 76	
McGregor, A. B.	Rosdorn, Sask.	112	161	102	15	2,341 55	450 00	8 59	
McGregor, D. S.	Saskatoon, Sask.	1,147	318	10	48	12,658 45	700 00	80 41	
McInosh, Robert.	Lethbridge, Alta.	73	43	21	9	324 12	225 00	5 44	
McKay, O.	Quill Lake, Sask.	170	49	2		1,655 50	175 00	20 80	

C.—STATEMENT showing principal work of Homestead Inspectors during the period from July 1, 1906, to March 31, 1907.

Name.	Headquarters.	Land Inspections made.	Applications for Patent taken.	Miles travelled by Wagon.	Miles travelled by Rail.	Travelling and Living Expenses for self and team.	Expenses for new and old travelling equipment.	Remarks.
Bannerman, J.A.	Red Deer, Alta.	1,027	46	4,329	7,528	\$ 1,386 84	\$ 16 00	Off duty two months.
Bell, George A.	Alameda, Sask.	273	62	773	355	315 51	8 65	
Brooke, A.W.	Moosajaw, Sask.	706	120	1,688	2,026	879 54	16 50	
Bryant, T.W.	Calgary, Alta.	315	208	2,585	814	494 92	24 75	
Buchanan, D.	Minnedosa, Man.	878	165	3,366	1,448	579 25	13 00	
Clouston, Geo. H.	Battleford, Sask.	727	121	2,824	275	363 10	22 35	
Cunningham, F.J.	Vegreville, Sask.	152	256	2,877	1,432	642 60	33 85	Appointed March 8, 1907. Resigned July 16, 1906. No September returns.
Currie, A.B.	Kamloops, B.C.		3					
Dunbar, D.C.	Estevan, Sask.							
Duggan, L.	Saskatoon, Sask.	1,213	38	3,511	1,432	1,318 54		
Foley, R.D.	Winnipeg, Man.	100	61	1,472	575	266 85	49 90	
Gibson, James S.	Brandon, Man.	157	48	1,022	6,219	460 70	6 50	
Gladstone, W.E.	Prince Albert, Sask.	1,306	11	2,183	1,332	679 15	46 35	
Holmer, Albert.	Calgary, Alta.	818		2,315	3,634	759 22		
Holden, J.B.	Calgary, Alta.		15	92	144	44 85	2 00	
Kennedy, F.	Vegreville, Alta.	1,745	337	3,692	1,281	836 57	32 60	Resigned July 31, 1906.
Laumondiere, Wm.	Winnipeg, Man.	196	24	1,368	1,216	578 82	17 50	
Link, Adani.	Lethbridge, Alta.	377	193	3,457	877	777 90	14 00	
Magee, W.D.	Lamerton, Alta.	11	63	92	759	143 65		
Moffat, James	Marcelin, Sask.	446	136	4,798	1,401	977 07	28 55	
McCallum, N.G.	Yorkton, Sask.	446	151	1,644	210	373 00	16 00	
McDonald, Jas.	Edmonton, Alta.	254	276	4,434	180	918 85	208 85	Appointed Timber Inspector, March 9, 1907.
McDonald, D.J.	Kamloops, B.C.	67	3	744	5,141	666 30		
McGroug, R.E.	Gilbert Plains, Man.	63	114	2,308	969	569 49	24 55	
McLeod, D.	Yorkton, Sask.	642	294	3,158	352	295 89	16 60	
McMillan, Wm.	Techerme, Man.	714	32	2,210	1,545	452 97		
McNab, D.C.	Brandon, Man.	879	136	1,353	2,389	507 10		
Nichol, W.F.	Estevan, Sask.	108	107	1,573	1,184	417 29	13 45	
Ober, Edward.	Crack, Sask.	1,067	159	3,335	1,069	499 67		
Olivier, R.J.	Hanley, Sask.	596	71	3,345	470	876 31		
Porter, S.F.	Regina, Sask.	2	20	326	4,154	324 35		
Redington, W.R.	Lloydminster, Sask.	855	84	2,548	1,038	821 08	317 00	Four months in charge of special inspection work.
Seale, John.	Dauphin, Man.	358	49	2,846	2,157	587 10	48 15	
Stanford, J.E.	Didsbury, Alta.	277	187	3,043	1,283	608 62		
Stuart, W.W.	Calgary, Alta.							No returns. Died in 1906.
White, W.H.	Ft. Saskatchewan, Alta.	210	99	4,415	198	664 18	19 00	
		17,015	3,703	79,212	51,086	20,087 09	995 50	

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No. 3.

REPORT OF THE AGENT AT BATTLEFORD.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,

BATTLEFORD, SASKATCHEWAN, April 12, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of this office for the fiscal nine months ending March 31, 1907.

Comparing the past period with the previous nine months, it is noticed that there has been a slight decrease in the number of homestead entries made, but this is undoubtedly due to the extreme severity of the winter now ended, which came at least a whole month earlier than the previous one, and the spring rush of settlers has not yet commenced, while at this time last year it was in full swing.

These conditions were particularly noticeable in the southern part of this agency, known as the Tramping Lake district, where fuel is scarce. Moreover, many of the settlers went into occupation of their land late last fall and were totally unprepared when winter came upon them.

The situation, however, was relieved by the prompt action of the government in having the matter thoroughly looked into, and fuel and provisions expeditiously supplied to the needy ones.

At the same time telegraphic instructions were received from the minister permitting settlers to cut timber on government land for immediate use as fuel, without permit or dues, and the protecting of all homestead entries from cancellation until the 1st proximo was also very timely and beneficial.

Such conditions are not likely to occur again. In the course of only a few months the district to the south will be covered by two or more railway lines, doing away with any possibility of congestion of traffic, and bringing that part of this province within reach of eastern markets.

Following is a partial list of the work done during the past nine months:—

Homestead entries granted.. . . .	3,212
Homestead entries cancelled.. . . .	1,635
Land scrip located (acres).. . . .	16,920
Timber permits issued.. . . .	130
Hay permits issued.. . . .	74
Applications for patent received.. . . .	551
Letters received.. . . .	22,335
Letters written.. . . .	15,600
Total revenue.. . . .	\$44,765.96

Your obedient servant,

L. P. O. NOEL,

Agent of Dominion Lands.

No. 4.

REPORT OF THE AGENT AT BRANDON.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,

BRANDON, MANITOBA, April 3, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—In submitting the report for the fiscal nine months ending March 31, last, I beg to say that as the vacant lands in this agency consist only of a few scattered quarter-sections of very inferior quality, the settlers coming in have to seek homesteads elsewhere, consequently the work here does not give the showing of former years. The cancellations grow less, the homesteaders making efforts to fulfil their duties in order to remain in a well-settled part of the province.

The country is prospering in every way; the prices of farm lands are steadily increasing, as well as the demand. In travelling through the country, you cannot fail to notice the improvement in the farm buildings, and everywhere you can see comfortable farm houses with large, well-built barns, granaries, &c. Another noticeable feature is the tree planting; nearly every farm has its shade trees, as well as a number planted closely together, protecting the buildings from the storms and allowing the transplanting of them as they grow larger.

The contemplated change in the Dominion Lands Act is unsettling many of the farmers in my agency, and they are making preparations and offering for sale their farms, with the intention of going west, where they hope to secure second homesteads and pre-emptions and secure lands for their sons, who are getting at an age to be eligible, and who could only secure lands here by purchase.

The railway facilities at the present time are inadequate to cope with the business of the country, thousands of bushels of grain still awaiting transportation. A great deal of hardship was caused during the past winter by the shortage of coal and wood, it not having been brought into the country at the proper time.

Immigration has opened up, and train loads of people are passing through this city, going further west. At the present time it is utterly impossible to obtain farm labourers or domestic help. The farmers are becoming very anxious, as the spring work may open up at any time, without the necessary help to put in the crop. The tendency of the Immigration Department seems to be to send the incoming men to points further west. I think the interests of the country would be better served by making a more equal distribution of the men, sending them to the older settled parts as well. Five hundred men could easily be placed at this point, and none have come. Daily inquiries are made by farmers for men. The immigration hall has been moved and is now in good shape, everything being kept in first-class order by the caretaker, and every comfort can be given to the settlers until they obtain suitable work.

The following is a statement of the work performed for the past nine months ending the 31st ultimo:—

Homestead entries granted.	82
Applications for patent received.	479
Cancellations of entries.	59
Letters received.	5,547
Letters sent.	4,605

Your obedient servant,

L. J. CLEMENT,
Agent of Dominion Lands.

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No. 5.

REPORT OF THE AGENT AT CALGARY.

DOMINION LANDS AND CROWN TIMBER OFFICE,
CALGARY, ALBERTA, April 16, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit my report of the work performed in this office during the nine months ended March 31, 1907.

The number of homestead entries, 973, is a decrease from the previous twelve months of 1,109. This I attribute to the fact that we have had very little homestead land within a radius of 50 or 60 miles of the railway, and the majority of the entries have been for lands that were cancelled from time to time for the non-performance of the homestead duties by the previous entrant. We have, however, north and east of the big Red Deer river, about 230 townships that are very sparsely settled, where a large number of home-seekers could be located, provided railway facilities were guaranteed. I expect the Canadian Northern and Grand Trunk Pacific will tap this particular district before very long, and in the meantime we shall require to direct a considerable amount of settlement in there.

The revenue from lands amounts to \$28,066.62, exclusive of the amount paid at head office on account of sales of lands, grazing leases, &c., being a decrease of \$15,537.20 from the revenue of the previous twelve months.

As the business for the Timber and Mines Branch for this district is also conducted at this office, I may mention that the revenue from this branch amounted to \$33,924.14, an increase over the amount for the previous twelve months of \$6,185.81.

Prospects for a good crop certainly never looked better at this season of the year. The fall wheat experienced no damage whatever during the winter, and the best crop ever harvested in this country is looked for this year, unless some unforeseen thing happens.

The winter has been a very severe one, and in some portions of Alberta the snow has been very deep, which, together with the intense cold, created a considerable loss among the cattle upon the ranges, where food and shelter could not be provided, although the loss has not been so great as at one time expected.

The price of beef is considerably higher than it was last year, which will compensate the ranchers to a considerable extent.

Horses command a very high price; never before have they been so high. A good heavy team will bring readily \$400; one pair sold at auction a few days ago for \$575.

The settlers throughout the country are very happy and cheerful, notwithstanding the severe winter, and the prospects generally for farmers and business men are very bright. According to an estimate made by Mr. James Winn, Immigration Agent at this point, the immigration into Alberta, via Calgary, has been larger than any previous nine months, and there has been no difficulty in placing those requiring employment.

The city of Calgary continues to forge ahead very rapidly, and the same may be said of all the smaller places throughout Southern Alberta.

I append hereto a detailed statement of receipts on account of Dominion lands, exclusive of the amount paid at head office.

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Attached hereto is also a statement of the work performed at this office. Although there has been a decrease in the number of homestead entries, yet there has been a very large increase in other work.

Your obedient servant,

J. R. SUTHERLAND,

Agent of Dominion Lands.

STATEMENT of receipts on account of Dominion Lands for the nine months ending
March 31, 1907.

973 Homestead entries.. . . .	\$ 9,710 00
67 Payments on account of improvements.. . . .	4,031 25
73 Land sales (cash).. . . .	12,964 74
5 Land sales (scrip).. . . .	1,200 00
1 Coal fee.. . . .	5 00
18 Sundries payments.. . . .	4 24
5 Seed grain collections.. . . .	151 39
	<hr/>
	\$28,066 62

STATEMENT of work performed during the nine months ending March 31, 1907.

Letters written.. . . .	20,011
Letters received.. . . .	28,861
Applications for patent received.. . . .	1,007
Homestead entries cancelled.. . . .	734
Homestead entries granted.. . . .	973
Land sales.. . . .	78
Half-breed scrip location.. . . .	1
Payments on account of improvements.. . . .	67
Timber ground rent collections.. . . .	7
Payments royalty on sales (timber).. . . .	41
Timber permits.. . . .	687
Timber seizures.. . . .	11
Hay permits.. . . .	47
Grazing rent collections.. . . .	66
Mining application fees.. . . .	19
Coal land fees, sales and royalties.. . . .	119
Seed grain collections.. . . .	5
Sundry payments.. . . .	18

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No. 6.

REPORT OF THE AGENT AT DAUPHIN.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,

DAUPHIN, MANITOBA, March 30, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the following report for the Dauphin district, covering the nine months ending this day, being the end of the fiscal year.

This report deals more particularly with that portion of the district that was for several years past the Dauphin section; the tract recently handed over to me, which was formerly the Minnedosa district, I have not the same personal knowledge of, and therefore, cannot express myself in regard thereto as fully as I would like to, though I hope to be better advised as to it before long.

The district as a whole has shared with the rest of the west in its prosperity; many settlers have joined us, these including farmers as well as artisans, of all classes, with business men, the growing towns and villages having attracted the latter, as good opportunities for prosecuting their various callings were presented.

Trade has been steadily on the increase, though somewhat hindered during the past winter owing to shortage of cars, which prevented farmers from marketing their grain, and considerable inconvenience was experienced in delayed payments of obligations due. Of late, however, this situation has been relieved, the lines of railway being opened and shipments moving freely.

Crops were good and prices fair, and it is estimated that not less than 2,000,000 bushels of wheat will be marketed from this northern portion of the district. Oats and barley were also grown to a considerable extent, though no surplus for export was produced, the heavy local demand for the supply of lumber and railway work taking up the visible supply.

Mixed farming is being paid more attention to from time to time, with a marked result as the settlers get more acreage under cultivation, and the returns will in the future be still more noticeable.

Heavy importations of horses have been made, bringing good returns, as many of our foreign people have now arrived at that stage when the oxen formerly used cannot do their work. Some fine breeding animals have been found in these importations.

All the municipalities have prosecuted the work of improvements, in roads, ditching, bridges, &c., so far as the requirements warranted, resulting in great benefit to local travel.

Many heavy transactions in sales of lands have been reported, covering both wild and improved farms, high prices being secured in many instances.

Considerable settlement has taken place in the tract between Lakes Dauphin and Manitoba, and further surveys in this section would be advisable.

The great snow fall of last winter, the heaviest for many years, in certain localities, and which came very early in the season, considerably hampered lumber operations, in several instances rendering it impossible for any timber to be taken out, but as these conditions obtained over only a part of the district, work was carried on in others as usual, so that there is a fair average quantity of building material ready for the market when called for.

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Certain parts of the district were somewhat short of fuel, at times, owing to the depth of snow preventing local supplies being brought in, and blocking the various lines of railway, on which source many of our towns depended for supplies; but no serious hardships were experienced.

The demand for labour of all classes has been fairly well met, but no doubt from this out of snow preventing assistance from outside points as our foreign settlers, who in the past have filled the demand, in a great measure, cannot longer be depended on, they having now placed such areas under cultivation as will necessitate their attendance, the women and children being no longer able to take off the harvest.

The health of the district has been good, no serious epidemics having visited us, and the general condition is most prosperous.

I subjoin a statement of some of the leading lines of work carried on in the office.

Your obedient servant,

F. K. HERCHMER,

Agent of Dominion Lands.

STATEMENT of certain lines of work carried through in the Dauphin Lands Office during the nine months ending March 30, 1907.

Homestead entries granted.	358
Timber permits issued.	662
Timber seizures made.	68
Seed grain liens collected.	19
Letters received.	7,824
Letters written.	5,227
Applications for patent taken.	325
Entries cancelled.	178

No. 7.

REPORT OF THE AGENT AT EDMONTON.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS OFFICE,

EDMONTON, ALBERTA, April 2, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of this office for the nine months ending March 31, 1907.

In order to curtail my report as much as possible I will simply enumerate the most prominent features of affairs in general.

The severity of the winter has proved the safety and benefit of living near coal and timber lands which are easy of access. The most prominent features of the year were:—

Increase in value of timber lands. Activity in obtaining control of coal lands by individuals and companies. Large demand for all kinds of labour. Great increase in the price of lumber, which has become a detriment to the development of the country. Lack of sufficient transportation facilities. Rapid increase in the value of farms and town lots. The springing up in a day of new towns and villages. The great increase in the number of wealthy farmers and citizens. The keen interest taken in the new

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Lands Act. The movement of farmers to the towns. The great desire of settlers to take up land in the Peace River country. The lack of domestic help and unskilled labour. The general feeling of prosperity and absolute faith in the future of the district by one and all.

The returns given below show the progress of the district:—

HOMESTEAD ENTRIES AND REVENUE.

1904-5, entries, 2,903; revenue, \$43,682.36; 1905-6, entries, 4,601; revenue, \$70,984.81; 1906-7 (nine months of), entries, 2,766; revenue, \$82,325.72.

SUMMARY OF ACTUAL BUSINESS DONE.

Letters received.	22,437
Letters sent.	22,189
Applications for patent.	1,250
Homestead entries cancelled.	1,185
Hay permits issued.	49
Timber permits issued.	1,228
Homestead entries granted (nine months).	2,766
Land scrip located.	26
Revenue.	\$82,325.72

Your obedient servant,

A. G. HARRISON,

Agent of Dominion Lands.

No. 8.

REPORT OF THE AGENT AT ESTEVAN.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

ESTEVAN, SASKATCHEWAN, April 10, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of this office for the year ending March 31, 1907.

I am pleased to be able to report that the crop of last year was an abundant one, the average yield of wheat being about 22 bushels per acre, but owing to the blockades on the railroads much of the wheat is still in the hands of the farmers or in store in the elevators. The winter, which set in about the middle of November, has been a very severe one; the continued cold weather and deep snow greatly interfered with the movement of trains, consequently there was considerable inconvenience experienced by the settlers, owing to the scarcity of fuel. I am pleased to be able to say that the reports published in the newspapers in regard to the condition of the settlers were much exaggerated. The homestead inspectors were given instructions to visit each settlement throughout the district and report as to the condition of the settlers in regard to supplies of fuel and provisions. Only one or two cases were found where settlers were suffering for want of fuel, and they were being looked after by neighbours until the

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condition of the roads permitted them to get supplies from town. The Royal Northwest Mounted Police had also instructions to visit the outlying districts and look after the needs of the settlers. The order of the minister protecting all homestead entries from cancellation till May 1 has been largely taken advantage of.

There has been a large increase in the number of settlers coming into this district, many of whom have bought lands in the vicinity of the towns. The settlement now extends as far west as the Willow Bunch, where a number of townships were surveyed last year, and a number of homesteads taken up.

The lands in the Willow Bunch district are now in the Moosejaw agency, as all lands west of range 18, which were formerly in the Alameda district, have been added to Moosejaw. Owing to the lands now open for homestead entry lying west of the Soo line of railway, considerable inconvenience was experienced by the settlers having to come to Alameda to transact business. It was, therefore, decided to move the land office to Estevan, a town of considerable importance on the Soo line, and also the terminal point of the Souris-Estevan branch. The office was opened here on April 2. A large amount of breaking was done last year, and there will be a large increase in the acreage brought under cultivation this season. I regret to report the death of Mr. John Mooney, of the staff of this office, who died on February 7, last.

Appended is a statement of work performed during the fiscal year:—

Letters received.. . . .	12,854
Letters written.. . . .	10,261
Applications for patent.. . . .	1,240
Entries cancelled.. . . .	486
Homestead entries.. . . .	1,115
Land sales.. . . .	7
Timber permits issued.. . . .	8
Hay permits.. . . .	44
Grazing rents.. . . .	5
Royalty coal mining.. . . .	5
Revenue.. . . .	\$15,973.10

Your obedient servant,

R. CLAUD KISBEY,

Agent of Dominion Lands.

No. 9.

REPORT OF THE AGENT AT HUMBOLDT.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

HUMBOLDT, SASKATCHEWAN, March 30, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to report that during the period of the fiscal nine months ending on the 31st instant, the Humboldt agency has been in operation from November 1, 1906, being a period of five months.

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The total receipts for this time amount to \$8,430.10, being made up as follows:—

752	Homestead entries, fees for which amount to.. . .	\$7,380 00
36	Payments for improvements, amounting to.. . . .	762 00
2	Payments on account of land sales.. . . .	110 50
	Sundries.. . . .	46 75
109	Timber permits issued, fees for which amount to.. . .	32 75
	School land sundries.. . . .	77 25
1	Collection on account of seed grain lien.. . . .	20 85

\$8,430 10

The sum of \$1,936.30 has been paid for salaries for this office, the staff of which consists of six at the present time.

The total disbursements of contingent funds amounts to \$976.77, in which is included cost of transcription work and cost of packing and shipping records from the Prince Albert, Regina and Yorkton agencies to this office.

There were 374 applications for patent recommended and 280 entries cancelled.

The letters received numbered 10,081, and 6,483 have been written.

The work appears to be in a very satisfactory condition all through the agency with the exception of this office, where the correspondence is considerably behind, this being caused by lack of sufficient staff to carry on the work. The attention of the Inspector of Dominion Land Agencies has been called to this matter, and he has promised to increase the staff at the earliest possible opportunity.

During the past winter the number of incoming settlers has been considerably lessened on account of the lack of efficient railway service; notwithstanding this fact, this office and the six sub-agencies tributary thereto have been kept busy.

Numerous reports have been circulated by the public press and other agencies relative to the suffering caused by the severe weather during the past winter and the blockade resulting therefrom on all railway lines. I am pleased to be able to report that so far as this district is concerned these reports have been greatly exaggerated. Careful inquiry has been made in this direction, and no single case of actual suffering through lack of fuel or provisions has been brought to my attention.

Notwithstanding this fact, many settlers and intending settlers have, however, experienced great inconvenience through the inefficient service given by the Canadian Northern Railway Company, which fact is to be deplored, as such experiences are not easily forgotten by new settlers.

There are still about 4,000 quarter-sections open and available for homestead entry in this agency, and from correspondence on file a large number of settlers from the United States, Europe and many of the British colonies intend homesteading in the district during the coming spring and summer, and all indications point to the fact that the coming fiscal year will be the heaviest on record in this department.

Your obedient servant,

GEO. L. DEMPSTER,

Agent of Dominion Lands.

No. 10.

REPORT OF THE AGENT AT KAMLOOPS.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS AND CROWN TIMBER OFFICE,
KAMLOOPS, B.C., April 3, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the annual report of this office for the nine months ending March 31, 1907. The revenue collected at the office is practically the same as during the corresponding nine months last year. There is, however, a small decrease, which may be accounted for by the rental collected on leases during the month of March this year being only about \$600 as against \$1,500 for the same month last year; but the principal reason why the nine months referred to have not shown a larger increase is owing to the fact of the land in this agency being practically withdrawn from sale. A number of settlers have squatted upon unsurveyed lands in townships 17, 18 and 19, range 17, west of the sixth meridian. The lands referred to are now surveyed, but the plans of survey have not yet been received at this office, consequently I have been unable to deal with them. The prompt action of the department in having plans of survey referred to forwarded to this office would enable me to grant these homestead entries.

The prospects for an abundant harvest are bright. The snowfall during the past winter has been very heavy, and the farmers are of the opinion that they will have plenty of water in the dry belt for irrigation purposes, even without the aid of rain, to insure the expected crop.

The following is a summary of the work done during the nine months:—

Homestead entries granted.	46
Homestead entries cancelled.	16
Applications for patent received.	25
Number of acres sold.	1,647
Revenue collected.	\$12,504.15

Your obedient servant,

A. B. CURRIE,

Agent of Dominion Lands.

No. 11.

REPORT OF THE AGENT AT LETHBRIDGE.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS AND CROWN TIMBER OFFICE,
LETHBRIDGE, ALBERTA, April 9, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit for your consideration the annual report of this office for the period ending March 31, 1907.

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I have much pleasure in stating that the prosperity of Southern Alberta is continuing and settlers are pouring into this district from all parts of the States, as well as from eastern Canada, which tends to show the faith they have in its future possibilities. At the present time settlers are busy commencing farming operations, and the present year, from prevailing indications, should prove a very satisfactory one to those engaged in this line of business.

Settlement is reaching out in every direction, and one of the requirements to complete the settlement in the west is more railways.

Large tracts of land have been purchased throughout this district from the railway and irrigation companies, and the purchasers are daily disposing of the same to intending settlers. A large percentage of the settlers locating in Southern Alberta are actual farmers from the United States, with capital, and should make a success of farming in this country.

While the homestead entries for the Lethbridge agency are not quite as numerous as for the year ending June 30, 1906, the work of the office has increased materially and has been disposed of satisfactorily, although additional office accommodation and assistance are very necessary. The entries of homesteaders who are not performing their duties are being cancelled in large numbers, although the entries cancelled this year are not as numerous as in previous years, as the homesteaders are making every effort to comply with the regulations. In cases where entries have been cancelled, the lands are being rapidly taken up by people on the ground who desire homesteads in suitable localities.

The revenue of the timber and mines branch, as well as the land branch, has increased during the present year, but as a great deal of the timber business for this district is transacted through the Calgary office, the revenue of this branch is much smaller than it would be were the whole business pertaining to the same done here. A very large percentage of the grazing rental, as well as moneys paid on account of coal mining lands, is paid direct to the department and, therefore, the amounts do not appear in my returns.

The sub-agents and other officials throughout this district have been very busy, and deserve credit for the manner in which they have performed their departmental duties. The staff has worked faithfully and is deserving of special mention.

The following is a partial list of the work performed during the past nine months:—

Letters received.. . . .	18,035
Letters sent.. . . .	14,855
Homestead entries granted.. . . .	1,418
Homestead entries cancelled.. . . .	648
General sales.. . . .	135
Hay permits issued.. . . .	73
Timber permits.. . . .	276
Timber seizures.. . . .	16
Applications for patent received.. . . .	507
Grazing rents.. . . .	90

Your obedient servant,

J. W. STAFFORD,

Acting Agent of Dominion Lands.

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No. 12.

REPORT OF THE AGENT AT NEW WESTMINSTER.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,

NEW WESTMINSTER, B.C., April 3, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—In accordance with the departmental instructions, I have the honour to submit the report of transactions of this office for the period of nine months from July 1, 1906, to the end of the present financial year, March 31, 1907.

This period has been one of *bona fide* prosperity throughout British Columbia generally; and this district has shared largely in this progress.

Owing to the uneven character of much of the land included in this agency, and the fact that timber limits are constantly extending in area, I find it very difficult to locate strangers who desire homesteads, consequently much of my time is absorbed in explaining these peculiarities to satisfy people that the business is of necessity tedious.

The number of entries made does not represent the number of settlers who go on some unsurveyed lands and wait.

Below I append an abstract of work from the monthly summaries during the nine months:—

Letters received.	1,551
Letters sent, besides circulars.	1,248
Homestead entries.	29
Total receipts.	\$6,540.14
Total contingent expenditure.	\$199.90

Your obedient servant,

JOHN MCKENZIE,

Agent of Dominion Lands.

No. 13.

REPORT OF THE AGENT AT PRINCE ALBERT.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS AND CROWN TIMBER OFFICE,

PRINCE ALBERT, SASKATCHEWAN, April 4, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit my report for the nine months ending March 31, 1907. From the comparative statement below it will be seen that the revenue has increased \$10,748.68 over the same period last year, while the expenditure in connection with the office is less by \$305.52. The past year has been one of marvellous ex-

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pansion throughout the west; the country is in a very prosperous condition, and all indications point to a still greater development this coming season, already all railroads being taxed to their utmost capacity to handle the inrush of settlers.

Last season's crop was the best in the history of this district. About one-quarter of the crop is still unthreshed and another quarter is in the hands of the farmers, and I feel satisfied that the total wheat crop has been largely underestimated.

There has been a steady advance in the value of city and farm properties, fully justified by the wonderful earning capacity of the soil.

Notwithstanding the great development taking place, our vast natural resources are practically undeveloped as yet, but with the opening of the Hudson's Bay route an empire north of the North Saskatchewan river, rich in timber, fish, minerals and agricultural lands will be opened up, and the future alone can gauge the vast extent of the wealth lying dormant there. Already in the newly surveyed townships north of this city, where until quite recently it was generally supposed no land existed fit for settlement, 130 homestead entries have been made within a radius of twenty miles.

STATEMENT.

Nine months ending March 31, 1906.		Nine months ending March 31, 1907	
Homestead entries	1,190	\$11,685 00	1,001 \$ 9,785 00
Improvements	63	1,394 25	74 2,170 90
Land Sales	22	2,311 52	23 2,556 58
" Scrip.		120 00	3 654 54
Sundries	14	25 00	25 34 40
Seed Grain	17	495 00	36 865 71
School Lands, Sundries	22	140 00	39 240 05

CROWN TIMBER.

Ground rent	10	\$ 740 43	4 \$ 401 58
Royalty on sales	13	4,734 47	26 16,053 41
Timber permits	1,175	6,794 28	1,073 6,583 35
Timber seizures	40	1,385 52	41 1,191 72
Hay permits	25	54 00	12 90 90
Grazing Dominion Lands	1	3 20	1 3 20

\$29,882 67

\$40,631 35

	Nine months ending March 31, 1906.	Nine months ending March 31, 1907.
Letters received	9,123	8,132
Letters written	8,204	7,041
Applications for patent	437	578
Entries cancelled	510	869
Salaries and disbursements	\$3,887.46	\$3,581.94

Your obedient servant,

R. S. COOK,

Agent of Dominion Lands.

No. 14.

REPORT OF THE AGENT AT RED DEER.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

RED DEER, ALBERTA, April 6, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—In submitting my annual report for the nine months ending the 31st ultimo, I am pleased to say that the Red Deer district has made satisfactory progress during that period. There has been a falling off in the number of homestead entries granted as compared with the corresponding period in 1905 and 1906, which no doubt is owing

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to the severe winter, as very many who, by letters, had expressed their intention of coming to settle here, were prevented from doing so by the extreme cold and depth of snow. The past winter was the most severe one in the memory of the oldest inhabitant; at the same time the settlers in this district had less to contend with than those of almost any other locality. Although the thermometer demonstrated the fact that the weather was extremely cold, the days were bright, with an entire absence of wind, or storms of any description, and those employed in out-door work, such as teaming wood, lumber, &c., did not lose a day on account of the weather, nor was there any inconvenience or suffering felt on account of lack of fuel. A daily train service was maintained on the main line, also on the branch lines running out from Lacombe and Wetaskiwin, with the exception of a few days, which I understand was due as much to defective engines as to cold weather, or deep snow.

The loss of cattle throughout this district, so far as I can learn, has not, up to the present time, been above the average, and the reports in eastern papers with regard to weather conditions, and losses of cattle, will not in any way apply to the Red Deer district.

The Central Alberta Stock Growers' Association, an organization brought into existence through the energy of Mr. George F. Root, one of our most progressive and successful ranchers, who came here from Iowa some six years ago, met in Red Deer on February 27. The principal question discussed at the meeting was whether the rancher is being paid a fair price for his cattle; at the same time almost every question affecting the farmer and rancher was brought up and thoroughly ventilated. So well had Mr. Root organized the meeting that he had present representatives from the Union Stock Yards, Chicago; Clay Robinson Co., the big live stock commission men of the States, J. Y. Griffin & Co., Gordon, Ironsides & Fares, of Winnipeg; P. Burns, of Calgary, and other large cattle exporters. A great deal of interest was taken in the meetings, the hall secured for the occasion being packed to the doors by an appreciative audience. Addresses were delivered by the following gentlemen: President Root, dealing with the factors which affect the marketing of cattle; Mr. M. J. Watson, of St. Paul, and Mr. Goodall, of Chicago, spoke of the arrangements and accommodations of the market there. Mr. A. Scott, manager of the Northern Bank, Edmonton, and Mr. D. M. Sanson, manager of the Canadian Bank of Commerce, Red Deer, dealt with the relations of the banks to the stockmen. Mr. McMullen, of the Canadian Pacific Railway Company, spoke of the heavy increase of stock shipments during the past year. Addresses were also delivered by Mr. A. L. Pawne, Fletcher Predin, M.P.P., W. F. Puffer, M.P.P., John T. Moore, M.P.P., Mayor Gaetz and President Ouimette, of the Board of Trade. It is impossible to estimate the beneficial effects that this meeting will have on the future of the country at large.

The healthy growth of the country is clearly shown by the increased demand for town property at enhanced values.

The following is a statement of business transacted during the nine months ending the 31st ultimo:—

1,693 Homestead entries.. . . .	\$ 16,770 00
453 Inspections.. . . .	
1,011 Cancellations.. . . .	
74 Improvements.. . . .	2,983 00
15 Land sales cash.. . . .	1,177 93
3 Sundries.. . . .	30 00
422 Timber permits.. . . .	399 81
4 Mining fees.. . . .	40 00
76 Coal land fees.. . . .	372 55
15 Grazing.. . . .	143 73
68 Hay.. . . .	181 23
1 Seed lien collection.. . . .	13 03

\$22,084 15

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Letters received.	12,901
Letters written.	10,091
Applications for patent.	636

Your obedient servant,

W. H. COTTINGHAM,

Agent of Dominion Lands.

No. 15.

REPORT OF THE AGENT AT REGINA.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

REGINA, SASKATCHEWAN, May 22, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit my report for the nine months ending March 31, 1907. The statement of work performed is as follows:—

5,762 Homestead entries.	\$56,340 00
232 Improvements.	11,159 61
70 Land sales.	13,778 13
Sundries.	145 65
803 Timber permits.	278 75
1 Timber seizure.	1 50
77 Hay permits.	201 60
16 Grazing rents.	205 50
School lands sales.	830 47
36 Seed grain collections.	1,567 17

 \$84,508 38

Land scrip located.	56 for 7,040.10 acres.
Letters received.	51,196
Letters written.	47,200
Applications for patent sent to head office.	2,382
Entries cancelled.	3,492

In comparing this statement with the nine months ending March 31, 1906, it shows a slight decrease. This can be accounted for by the opening of the office at Humboldt.

The past winter has been the longest and possibly the most severe in this country for a good many years, and at one time presented a very serious aspect, especially as to the question of fuel, and no doubt there was a great amount of suffering.

The protecting of homestead entries until June 1 has been a great benefit to a large number, and lessened the cancellation work in the office for the time being.

The opening of the office at Moosejaw will relieve the work of this office to a certain degree.

The area under crops this year will not be as large as formerly, but at the present time there is a prospect of a good crop, although the season is over a month later than in former years.

Your obedient servant,

L. RANKIN,

Agent of Dominion Lands.

No. 16.

REPORT OF THE AGENT AT WINNIPEG.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS AND CROWN TIMBER OFFICE,
WINNIPEG, MANITOBA, May 4, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit the thirty-third annual report of the Dominion Lands Office, which this year, owing to the change made in the date of the ending of the fiscal year to March 31, covers only a period of nine months.

OFFICE WORK.

The number of homestead entries granted was 737, as against 464 for the corresponding months in 1905-6. The work of the office as a whole shows a decided increase over that of former years.

The net revenue from all sources reached the sum of \$61,092.90. The correspondence was heavy, there being 13,101 letters received and 10,381 written. The applications for patent dealt with and recommended numbered 337, and entries cancelled, 241. During the period under review, 215 hay permits were issued, of which number 143 were upon school lands and 72 upon Dominion lands. The 737 settlers who obtained entries represent nearly every nationality, as is shown by the following summary, the number including members of their families: British, 126; Canadian, 319; American, 20; Russian, 61; Swedish, 141; Icelandic, 104; Polish, 59; Hungarian, 21; Armenian, 14; Belgian, 10; Turks, 8; Dutch, 1; Norwegian, 58; German, 66, and Austrian, 964.

HOMESTEAD LAND.

The only remaining available land in any quantity, surveyed and open for homestead entry in this district is situated in the northerly and easterly parts thereof, which for the most part are covered with scrub and timber and not of the class to be readily taken by Canadian and American settlers.

There has been an active demand for homesteads in the surveyed townships crossed by the line of the Grand Trunk Pacific Railway, and a large number of entries have been granted.

MINING.

During the nine months ended March 31, 19 mining claims were recorded. These claims are situated in eastern Manitoba, in the vicinity of Hawk lake, on the islands and shores of Lake Winnipeg, on the Nelson river and Hudson's bay. In recording these claims it was stated that 16 were staked for gold and 3 for iron. No doubt a larger business would have been done but for the fact that a number of those persons following prospecting as a business left the district with the rush for Cobalt during last summer.

There are a large number who are confident that valuable deposits of minerals exist in eastern Manitoba and along the east side of Lake Winnipeg, and north in the country leading to Hudson's bay. No doubt if this is true, discovery will soon be made, as a thorough search for it by prospectors is being made.

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GENERAL.

In my last report I quoted the expressed opinion of crop experts, that the average yield of wheat crop for the province would be nineteen bushels to the acre. This prediction proved to be remarkably accurate, the exact percentage being 19.49, on a production of 61,250,413 bushels. The weather throughout both the harvest and threshing seasons was exceedingly favourable and the result was a bountiful harvest. Although about 24,000 helpers were brought in from Great Britain and eastern Canada, two or three thousand more could have been employed to advantage. The provincial Department of Agriculture reports the harvest of 1906 to have yielded: wheat, 61,250,413.4 bushels; oats, 50,692,977.7 bushels; barley, 17,532,553.9 bushels; flax, 274,330 bushels; rye, 100,680 bushels; peas, 67,301 bushels, and corn, 249,840 bushels, a total grain crop of 130,168,096, a gain for the year of 14,304,734.7 bushels.

The root crop was: potatoes, 4,702,595 bushels, and other roots, 3,446,432 bushels. The poultry sold by the Manitoba farmers in the fall of 1906 amounted to 557,421 pounds, and the value of their total dairy products was \$1,377,746.84. The total area under all crops in 1906 was 4,912,435 acres. The total area already prepared for crop for 1907 is 2,323,949 acres, an increase of nearly 300,000 acres over the previous fall.

I would call your attention to the unsatisfactory and uncomfortable premises occupied by this office. The building is very old, in a very bad state of repair and most unsanitary. It was erected in the year 1874, and is not now well situated to meet the convenience of the public who have business to transact thereat. I would respectfully recommend that quarters be provided for this office in one of the public buildings in the centre of the city.

Your obedient servant,

E. F. STEPHENSON,

Agent of Dominion Lands.

No. 17.

REPORT OF THE AGENT AT YORKTON.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

YORKTON, SASKATCHEWAN, April 11, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I beg to submit for your consideration the report of the transactions of this office for the nine months ending the 30th ultimo.

The number of homestead entries granted for the period of nine months was 1,721, as against 2,814 for the same number of months during 1906. This decrease is to be accounted for by the fact that the area of this agency was cut down considerably, some 101 townships being taken away and incorporated as part of the new agency at Humboldt, and also by the fact that nearly all homestead lands capable of fairly easy cultivation have been disposed of.

A line of railway is surveyed through this portion of the agency, and should the same become an actuality, the lands still available will no doubt soon be taken up. The main line of the above named railway runs along the northern fringe of the

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agency and many centres of trade have been created, which in a few years will become noted for the export of grain. These centres during the fall and winter months have seriously suffered on account of an inefficient railway service, although at points where grain was offered no serious blockade occurred.

During last summer and fall a second investigation of the manner in which the Doukhobors were performing their homestead duties was at work, as a consequence of which Doukhobor land matters were placed in the hands of the Rev. John McDougall, who was appointed a special commissioner for that purpose. All entries of Doukhobors in community were cancelled early in February last, then a proposal was tendered that these Doukhobors should apply to become British subjects and make re-entry for homesteads under certain stipulations by May 1 next. Complaints were received with reference to the methods employed by these people in the cutting of timber on Dominion lands and an inspector was delegated to prevent any illegal cutting on the part of the Doukhobors.

I am pleased to report that whilst the latter part of the winter was severe, settlers in this agency suffered no inconvenience in lack of fuel or scarcity of feed for stock. As an indication of the contented prosperity it is only necessary to call attention to the number of applications for patent recommended, namely, 1,343.

The following is a summary of business transacted:—

Homestead entries.. . . .	1,721
Sales.. . . .	45
Timber permits.. . . .	260
Hay permits (Dominion lands).. . . .	13
Hay permits (School lands).. . . .	51
Letters received.. . . .	34,403
Letters written.. . . .	22,289
Applications for patent.. . . .	1,343
Entries cancelled.. . . .	1,159
Revenue.. . . .	\$33,025.55

Your obedient servant,

JAS. E. PEAKER,

Agent of Dominion Lands.

No. 18.

REPORT OF THE MINES BRANCH.

DEPARTMENT OF THE INTERIOR,

OTTAWA, July 13, 1907.

W. W. CORY, Esq.,

Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit herewith the report of the Mines Branch of the Department of the Interior for the nine months which ended on March 31, 1907.

Owing to the increased activity in the demand for coal and mining lands and rights in the western provinces and territories of the Dominion, and the increased growth of the branches of the department in which such lands and rights were ad-

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ministered, it was deemed advisable in the public interest to establish a separate branch for the administration of all matters pertaining to mines, and on July 1, 1906, the Mines Branch was created, the duties assigned to it being the administration of all matters pertaining to the Yukon Territory, and of all mines and mining lands the property of the federal government, including coal in the western provinces and territories of the Dominion.

Commencing from July 1, 1906, the revenue of the Yukon Territory from its various sources, together with the revenue derived from mining lands in the western provinces and territories, including coal, previously reported by other branches, will in future appear in the report of the Mines Branch.

The revenue derived from all sources for the nine months which ended on March 31, 1907, amounts to \$579,846.84, and the statements lettered 'A' and 'B,' showing in different forms how this amount is made up, will be found at the end of this report; statement lettered 'A' shows the total revenue for each month, and statement lettered 'B' shows the revenue collected at each agency, including the Yukon Territory.

The revenue of the Yukon Territory, which amounts to \$229,818.93, is shown separately in statement lettered 'C.'

The Dominion Lands Office at Minnedosa was abolished on October 1, 1906, and on March 25, 1907, the Moosejaw Dominion Land Agency was created.

The reports for the nine months from the Commissioner of the Yukon Territory, the Gold Commissioner, Comptroller, Crown Timber and Land Agent, the Director of Surveys for the Yukon Territory and the Assistant Gold Commissioner at Whitehorse will be found under Part VII. of the general report.

TIMBER IN THE YUKON TERRITORY.

The total amount of dues collected on account of timber in the Yukon Territory during the nine months which ended on March 31, last, was \$15,732.58.

There are in existence 114 timber berths under license to cut timber, covering a total area of 270.11 square miles.

According to returns received in the department the number of feet B.M. of lumber manufactured during the period mentioned was 1,063,164; sold, 1,407,129; the number of railway ties manufactured, 44,944; sold, 42,941, and the number of cords of wood cut, 5,667; sold, 4,064. This does not include the large amount of timber and cordwood cut, free of dues, for mining purposes.

MINING LANDS OTHER THAN COAL.

During the nine months thirty-one entries for quartz mining claims were granted by the agents of Dominion lands in the western provinces and territories.

In the Yukon Territory 36,753 placer mining claims, 7,354 quartz mining claims and 54,191 renewals and relocations were recorded up to March 31, 1907. The returns for the nine months ending March 31, 1907, show that 1,993 entries for placer mining claims, 1,345 entries for quartz mining claims and 4,749 renewals and relocations were recorded. The revenue collected from these sources and from fees for registering documents in connection with mining operations was \$102,634.25.

Up to March 31, 1907, 95,935 free miner's certificates were issued, producing a revenue of \$946,762.76. During the nine months 2,278 free miner's certificates were issued, and the revenue derived therefrom was \$13,326.75.

On August 1, 1906, the issue of free miner's certificates was abolished, and since that date certificates have not been necessary covering any period subsequent thereto.

The following is a list of the government agencies at which free miner's certificates were issued and the number issued at each such agency during the period mentioned:—

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Dominion land agency at—

Calgary, Alberta.....	9
Edmonton, Alberta.. . . .	5
Lethbridge, Alberta.....	11
Winnipeg, Manitoba.. . . .	13

Agencies within the Yukon Territory—

Clear Creek.....	8
Dawson.....	1,747
Duncan.....	100
Sixtymile.....	14
Kluane.....	88
Whitehorse.....	211
Conrad.....	47

Other agencies and agents—

Ottawa, Ontario, Department of the Interior.. . . .	13
London, England, the High Commissioner's Office.. . . .	10
Vancouver, British Columbia, Dominion Assay Office.. . . .	2

Total.. . . . 2,278

The total revenue received for dredging leases in the Yukon Territory up to March 31, 1907, was \$151,524.60, and for the fiscal period of nine months, \$1,960.

The total revenue received for the rental of leaseholds in the western provinces and territories, excepting those of the Rocky Mountains park, up to March 31, 1907, was \$36,797.61, and for the past nine months, \$2,139.

The total sum collected up to March 31, 1907, for royalty on the gross output of placer mining claims in the Yukon Territory, after deducting the exemption allowed by the regulations was \$3,552,635.53. Of this amount the sum of \$82,622.42 was collected during the nine months covered by this report.

The royalty was collected at the following places:—

Dawson.....	\$80,530 38
Whitehorse.....	2,092 04
Total.. . . .	\$82,622 42

DREDGING.

Fifty-three leases to dredge for minerals other than coal, in the submerged beds of rivers in the Yukon Territory, are in force, covering a total frontage of 261.75 miles.

Thirteen leases to dredge for minerals in the beds of rivers in the provinces of Alberta and Saskatchewan are in force, covering a total frontage of 64 miles.

HYDRAULIC MINING.

Fourteen hydraulic mining leases are in force, having a total frontage of 40.53 miles. These leaseholds are all situated in the Yukon Territory. Since the regulations were first established in December, 1898, 47 hydraulic mining leases have been issued, all of which have now been cancelled with the exception of the above number.

7-8 EDWARD VII., A. 1908

COAL MINING LANDS.

The number of applications for coal mining lands received during the year was 2,376. The revenue for the nine months ending on March 31, 1907, derived from the sale of coal mining lands was \$335,795.97. The area sold was 103,931.04 acres, of which 103,171.04 acres are within the province of Alberta, and 760 acres in the province of Saskatchewan. The total area of coal lands sold up to March 31, 1907, was 252,371.49 acres, and the total amount received therefor was \$880,363.54. Statement lettered 'F' at the end of this report shows the revenue derived from the sale of coal lands for each fiscal year since 1896.

The total amount of revenue collected in each province on account of sales of coal lands for the nine months ending March 31, 1907, is as follows:—

Alberta.....	\$331,991 30
British Columbia.....	300 00
Manitoba.....	20 00
Saskatchewan.....	3,484 67
Total.....	\$335,795 97

Twenty-nine coal mining licenses embracing an area of 10,256 acres in The Rocky Mountains Park of Canada have been issued. The revenue derived therefrom during the nine months ending March 31, 1907, amounting to \$6,215.44, is made up as follows: Rental, \$1,758.64; royalty collected on coal mined, \$4,456.80. The total amount of rental collected up to March 31, 1907, was \$7,641.61, and the total amount of royalty collected to the same date was \$9,735.30.

The following is a statement of the office work performed from July 1, 1906, to March 31, 1907:—

Letters received and recorded.....	10,566
Letters sent.....	13,451
Pages of memorandum and schedule.....	9,287
Plans and sketches prepared.....	681

Mining.

Accounts kept posted—dredging 60 and hydraulic 15..	75
Applications for coal locations received.....	2,376
New entries and renewals for mining locations granted in the western provinces and territories, not including the Yukon.....	31
Applications for stone quarries.....	28
“ tar and asphalt.....	103
“ quartz claims.....	11
“ gypsum.....	2
“ sulphur.....	1
“ limestone.....	4
“ clay.....	1
“ petroleum.....	43
Applications for gold dredging, of which 65 are in the Yukon Territory and 26 in the western provinces and territories.	91
In the Yukon Territory the number of placer mining claims, renewals and relocations granted was.....	6,292
The number of quartz mining locations granted was..	1,345
Total.....	7,637

Miscellaneous.

Applications to purchase or lease lands in the Yukon Territory	77
Applications for water frontage.	2
Number of agricultural leases in force in the Yukon Territory, comprising an area of 404 acres.	8
Leases for water frontage issued.	3
Number of water front leases in existence.	19
Leases for stone quarrying in The Rocky Mountains Park of Canada, comprising a total area of 1,187.86 acres. . . .	4

On February 2, 1907, regulations governing the granting of homestead entries in the Yukon Territory came into force. Under the provisions of these regulations lands in the said Territory, suitable for agricultural purposes, were withdrawn from sale, and every person who is the sole head of a family and every male who has attained the age of eighteen years may obtain entry for 160 acres of such land.

By an order in council dated July 5, 1906, regulations were established for the disposal of water from streams and lakes in the Yukon Territory for the purpose of generating power, and for the control and management of the sale, transmission and use of such power. Under the provisions of these regulations twenty-seven applications have been filed for permission to divert water for power purposes, and leases have been issued to divert 5,000 inches of water from Little Twelve Mile river, and a like quantity from Benson creek, a tributary of the north fork of the Klondike river, for the purpose mentioned.

I have the honour to be, sir,

Your obedient servant,

H. H. ROWATT,

Chief Clerk.

7-8 EDWARD VII., A. 1908

REVENUE OF DOMINION LANDS

A.—STATEMENT of Receipts on account of Coal and Minerals in the Western Provinces
Mining Fees, Rental of Agricultural Lands, Waterfronts and Water
Territory for the nine months

Year.	Stone Quarries.	Peat Land Lease.	Timber Dues.	Coal Lands.	Mining Fees.	Hydraulic Leases.	Dredg- ing Leases, N.W.T.	Dredg- ing Leases, Yukon.	Gold Export Tax.
1906.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.. .. .			1,429 66	19,205 97	12,593 00	348 70			18,379 80
August.			1,725 87	4,038 50	18,955 56	507 00			20,605 35
September....			3,745 56	104,212 81	16,773 00	776 00			20,059 02
October.....	1,362 25	128 00	4,117 60	8,405 98	13,300 00		1,719 00	500 00	19,425 64
November.....			1,527 32	19,288 27	10,561 50	1,007 68			49 48
December.....			1,090 04	61,792 72	7,780 50		50 60		1,257 32
1907.									
January.....			495 32	16,722 99	7,866 00		20 00		2,669 76
February.....	156 88		537 37	19,258 84	7,382 75			235 00	150 99
March.....	7 25		1,063 84	82,869 89	8,820 00	706 50	350 00	1,225 00	25 06
Total	1,526 38	128 00	15,732 58	335,795 97	104,032 25	3,345 88	2,139 00	1,960 00	82,622 42

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INCLUDING THE YUKON TERRITORY.

and Territories, and Timber, Hay, Coal, Hydraulic Mining, Dredging, Royalty on Gold, Power, Survey Fees, and Sale of Dominion Lands in the Yukon ending March 31, 1907.

Free Certificates, Export of Gold.	Coal Mining.	Free Miner's Cer- tificates.	Water Power.	Hay Land, Yukon.	Office Fees.	Dominion Land Sales.	Sale of Quartz Acreage	Rental.	Survey Fees.	Amount.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
30 00	1,229 30	9,268 50	.....	105 00	2 00	383 34	389 80	.....	.....	63,365 07
37 50	184 00	2,707 50	.....	.....	2 00	1,516 80	340 71	8 25	.....	50,628 98
100 50	600 35	739 50	.....	.....	20 00	45 00	384 57	52 66	.....	147,508 97
31 50	2,132 41	271 00	.....	.....	8 50	1,841 58	264 46	.....	.....	53,507 72
50	584 79	84 50	.....	.....	2 00	596 08	.....	718 98	.....	34,421 10
3 50	161 60	15 00	250 00	.....	22 00	145 11	.....	5 00	.....	72,572 79
4 50	2,969 11	79 50	250 00	.....	.....	.....	180 82	928 28	.....	32,186 28
2 00	845 70	22 00	.....	.....	2 00	.....	100 63	.....	.....	28,694 16
5 50	830 14	139 25	.....	.....	4 00	470 92	113 17	230 75	100 00	96,961 27
215 50	9,537 40	13,326 75	500 00	105 00	62 50	4,998 63	1,774 16	1,943 92	100 00	579,846 34

H. H. ROWATT,

Chief Clerk.

7-8 EDWARD VII., A. 1908

DOMINION LANDS

B.—STATEMENT Showing the Total Amount of Revenue Collected at each Agency,

Agency.	Timber Dues.	Coal Lands.	Mining Fees.	Hydraulic Leases.	Dredging leases, N.W.T.	Dredging leases, Yukon.	Gold Export Tax.	Free Certificates Export of Gold.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Alameda		3,437 17						
Battleford		32 50						
Calgary		38,317 47	135 00					
Dauphin		20 00	20 00					
Edmonton		45,372 12	310 00					
Kamloops		110 00						
Lethbridge		240,564 76	70 00					
Moosejaw		15 00						
New Westminster		190 00						
Prince Albert								
Red Deer		7,659 45						
Regina		77 50						
Rocky Mountains Park			30 50					
Winnipeg			722 50					
London, England								
Vancouver								
Victoria								
Ottawa			110 00	1,581 38	2,139 00	1,960 00		
Dawson Gold Commission- er's Office			89,028 25	1,764 50				
Whitehorse Asst. Commis- sioner's Office			13,606 00					
Dawson Crown Timber and Land Office	15,295 21							
Whitehorse Crown Timber and Land Office	437 37							
Dawson Comptroller's Office								215 50
Dawson Royalty Collector's Office							80,530 38	
Whitehorse Royalty Col- lector's Office							2,092 04	
Dawson Dominion Lands Office								
Dawson Mining Recorder's Office								
Whitehorse Dominion Lands Office								
Whitehorse Mining Record- er's Office								
Total	15,732 58	335,795 97	104,032 25	3,345 38	2,139 00	1,960 00	82,622 42	215 50

SESSIONAL PAPER No. 25

REVENUE.

including the Yukon Territory, for the nine months ending March 31, 1907.

Coal Mining.	Free Minor's Certificates.	Water Power.	Hay Lands, Yukon.	Office Fees.	Dominion Land Sales, Yukon.	Quartz Acreage Sales.	Survey Fees.	Rental.	Peat Land Lease.	Stone Quarries	Amount.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
140 90											3,578 07
10 00											42 50
421 00	45 00										38,918 47
											40 00
683 66	22 75									562 25	46,950 78
10 00											120 00
177 35	55 00									7 25	240,874 36
											15 00
											190 00
										156 88	156 88
217 55											7,817 00
											77 50
6,215 44											6,45 94
	75 00										297 50
	50 00										750 00
	15 00										15 00
	17 00										17 00
1,144 16	285 00	500 00		20 00					128 00	800 00	8,667 54
	10,984 00										101,776 75
351 85	1,778 00										15,735 85
165 49			105 00								15,565 70
											437 37
											215 50
											80,530 38
											2,092 04
				40 50	3,420 49		100 00	1,943 92			5,504 91
						1,254 32					1,254 32
				2 00	1,578 14						1,580 14
						519 84					519 84
9,537 40	13,326 75	500 00	105 00	62 50	4,998 63	1,774 16	100 00	1,943 92	128 00	1,526 38	579,846 34

H. H. ROWATT,
Chief Clerk.

7-8 EDWARD VII., A. 1908

REVENUE OF THE

C.—STATEMENT of Receipts from Timber, Hay, Coal, Hydraulic Mining, Dredging, Water Power, Survey Fees, and the Sale of Dominion

Month.	Timber Dues.	Survey Fees.	Mining Fees.	Hydraulic Leases.	Rental.	Dredging Leases. Yukon.	Gold Export Tax.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1906.							
July.....	1,429 66		11,925 50	348 70			18,379 80
August.....	1,725 87		18,890 50	507 00	8 25		20,605 35
September.....	3,745 56		16,648 00	776 00	52 66		20,059 02
October.....	4,117 60		13,290 00			500 00	19,425 64
November.....	1,527 32		10,463 50	1,007 68	718 98		49 48
December.....	1,090 04		7,755 50		5 00		1,257 32
1907.							
January	495 32		7,861 00		928 28		2,669 76
February.....	537 37		7,380 25			235 00	150 99
March	1,063 84	100 00	8,420 00	706 50	230 75	1,225 00	25 06
Total.....	15,732 58	100 00	102,634 25	3,345 88	1,943 92	1,960 00	82,622 42

SESSIONAL PAPER No. 25

YUKON TERRITORY.

Royalty on Gold, Mining Fees, Rental of Agricultural Lands, Waterfronts and Lands for the nine months ending March 31, 1907.

Free Certificates Export of Gold.	Coal Mining.	Free Miner's Certificates.	Water Power.	Hay Land's.	Office Fees.	Dominion Lands Sales.	Sale of Quartz Acreage.	Amount.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
30 00		9,268 50		105 00	2 00	383 34	389 80	42,262 30
37 50		2,707 50			2 00	1,516 80	340 71	46,341 48
100 50	351 85	739 50				45 00	384 57	42,902 66
31 50		271 00			8 50	1,841 38	264 46	39,750 08
50	165 49	84 50			2 00	596 08		14,615 53
3 50		15 00	250 00		22 00	145 11		10,543 47
4 50		79 50	250 00				180 82	12,469 18
2 00		22 00			2 00		100 63	8,430 24
5 50		139 25			4 00	470 92	113 17	12,503 99
215 50	517 34	13,326 75	500 00	105 00	42 50	4,998 63	1,774 16	229,818 93

H. H. ROWATT,
Chief Clerk.

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YUKON REVENUE.

D.—STATEMENT showing the total Gold Production, the total Exemption, the total subject to Royalty, and the total Royalty collected for each Fiscal Year from May 1, 1898, to March 31, 1907.

Fiscal Year.	Gold Production.	Exemption.	Subject to Royalty.	Royalty Collected.	Infringe- ments.	Total Revenue.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1897-1898.....	3,072,773 20	339,845 00	2,732,928 20	273,292 82		273,292 82
1898-1899.....	7,582,283 02	1,699,657 02	5,882,626 00	588,262 37	1,681 15	589,943 52
1899-1900.....	9,809,464 64	2,501,744 64	7,307,720 00	730,771 99	2,269 05	733,041 04
1900-1901.....	9,162,082 79	1,927,666 62	7,234,416 17	592,660 98	3,767 05	596,368 03
1901-1902.....	9,566,340 52	1,199,114 64	8,367,225 88	331,436 79	95 25	331,532 04
1902-1903.....	12,113,015 34		12,113,015 34	302,893 48		302,893 48
1903-1904.....	10,790,663 12		10,790,663 12	272,217 96		272,217 96
1904-1905.....	8,222,053 91		8,222,053 91	206,760 87		206,760 87
1905-1906.....	6,540,007 09		6,540,007 09	163,963 25		163,963 25
Nine months ending March 31, 1907.....	3,304,791 05		3,304,791 05	82,622 42		82,622 42
Total	80,163,474 68	7,668,027 92	72,495,446 76	3,544,882 93	7,752 50	3,544,882 93
Summary for nine months—						
Dawson.....	3,221,180 30					80,530 38
Whitehorse.....	83,610 75					2,092 04
Total	3,304,791 05					82,622 42

YUKON REVENUE.

E.—STATEMENT showing the Revenue collected for Free Miner's Certificates issued during the Fiscal Years 1898 to March 31, 1907.

Fiscal Year.	Amount.
	\$ cts.
1897-1898.....	116,243 89
1898-1899.....	227,354 13
1899-1900.....	129,709 80
1900-1901.....	125,861 00
1901-1902.....	118,312 02
1902-1903.....	82,624 52
1903-1904.....	62,190 10
1904-1905.....	46,022 53
1905-1906.....	28,118 02
For July 1906 only.....	13,326 75
Total	946,762 76

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F.—STATEMENT showing the total revenue derived from the sale of coal land for each fiscal year since 1896.

Fiscal Year.	Amount.
	\$ cts.
1896-1897	75 76
1897-1898	1,833 74
1898-1899	350 00
1899-1900	5,650 33
1900-1901	101,772 00
1901-1902	16,270 32
1902-1903	31,055 38
1903-1904	68,949 75
1904-1905	35,695 00
1905-1906	125,754 12
For the nine months ending March 31, 1907	335,795 97

H. H. ROWATT,
Chief Clerk.

No. 19.

REPORT OF THE ACCOUNTANT.

DEPARTMENT OF THE INTERIOR, ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit statements of revenue collected from various sources during the fiscal period ended March 31, 1907, as follows:—

A.—Dominion lands, including Yukon Territory..	\$1,490,503 31
B.—Ordnance lands.. .. .	6,663 90
C.—School lands.. .. .	724,353 73
D.—Registration fees.. .. .	46,124 20
E.—Fines and forfeitures, N.W.T.. .. .	21 00
F.—Fines under the Immigration Act.. .. .	2,875 00
G.—Casual revenue.. .. .	8,910 81
H.—Seed grain repayments.. .. .	10,850 06

\$2,290,302 01

A statement of revenue on account of Dominion lands (marked I) shows the receipts monthly, classified under sub-heads.

Statement (marked J) shows a comparison between the receipts on account of Dominion lands for the fiscal period of nine months ended March 31, 1907, as compared with the revenue of the previous fiscal year.

Your obedient servant,

CHAS. H. BEDDOE,
Accountant.

7-8 EDWARD VII., A. 1908

A.—DOMINION Lands Revenue (cash and scrip) for the Fiscal Period ended March 31, 1907.

Agencies.	Cash.	Scrip.	Total.
	\$ cts.	\$ cts.	\$ cts.
YUKON TERRITORY.			
Sales of land.....	6,773 39	.....	.....
Rental of land.....	1,943 92	.....	.....
Map sales, office fees, &c.	42 50	.....	.....
Survey fees.....	100 00	.....	.....
Timber dues.....	15,732 58	.....	.....
Hay permits.....	105 00	.....	.....
Mining fees.....	102,234 25	.....	.....
Export tax on gold.....	82,622 42	.....	.....
Free certificates for export on gold.....	215 50	.....	.....
Free miner's certificates.....	13,309 75	.....	.....
Hydraulic leases.....	3,345 88	.....	.....
Dredging leases.....	1,960 00	.....	.....
Coal lands.....	517 34	.....	.....
Rent of water-power.....	500 00	.....	.....
Suspense accounts.....	588 00	.....	.....
	230,090 53	.....	230,090 53
DOMINION LANDS AGENCIES.			
Alameda.....	22,959 13	.....	22,959 13
Battleford.....	46,563 47	1,120 00	47,683 47
Brandon.....	6,732 92	.....	6,732 92
Calgary.....	68,341 38	1,200 00	69,541 38
Dauphin.....	9,138 50	.....	9,138 50
Edmonton.....	79,689 57	149 62	79,839 19
Humboldt (5 months).....	9,110 74	134 25	9,244 99
Kamloops.....	7,827 62	.....	7,827 62
Lethbridge.....	294,565 66	2,939 46	297,505 12
Minnedosa (3 months closed).....	1,032 61	.....	1,032 61
Moosejaw (1 month).....	610 25	.....	610 25
New Westminster.....	6,587 84	.....	6,587 84
Prince Albert.....	14,647 52	1,080 29	15,727 81
Red Deer.....	29,649 63	1,106 67	30,756 30
Regina.....	98,793 96	2,179 60	100,973 56
Winnipeg.....	20,098 63	1,440 00	21,538 63
Yorkton.....	27,404 08	27,404 08
	743,753 51	11,349 89	755,103 40

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Agencies.	Cash.	Scrip.	Total.
	\$ cts.	\$ cts.	\$ cts.
CROWN TIMBER AGENCIES.			
Alameda	3 00		
Battleford.....	56 75		
Brandon.....	92 15		
Calgary.....	15,094 91		
Dauphin.....	5,699 95		
Edmonton.....	39,046 08		
Humboldt (5 months).....	32 75		
Lethbridge.....	811 18		
Minnedosa (3 months closed).....	1,503 51		
Moosejaw (1 month).....	0 25		
New Westminster.....	185,168 80		
Prince Albert.....	24,677 73		
Red Deer.....	393 06		
Regina.....	267 51		
Winnipeg.....	89,515 61		
Yorkton.....	1,380 50		
	363,743 74		363,743 74
Rocky Mountains Park.....	15,883 51	3 91	15,887 42
Irrigation fees.....	404 51		404 51
Survey fees.....	50,862 03		50,862 03
Patent fees and interchange.....	205 00		205 00
Map sales, office fees, &c.....	4,696 47		4,696 47
Examination fees, D.L.S.....	420 00		420 00
Refunds of refunds.....	1,230 76		1,230 76
Mining fees.....	1,367 50		1,367 50
Hay lands.....	1,104 95		1,104 95
Grazing lands.....	43,711 91	400 00	44,111 91
Coal lands.....	2,804 62		2,804 62
Stone quarries.....	1,526 38		1,526 38
Dredging leases.....	2,139 00		2,139 00
Townsite sales.....	9,085 32		9,085 32
Suspense account.....	3,696 97		3,696 97
Miscellaneous.....	2,022 80		2,022 80
	141,161 73	403 91	141,565 64
Refunds.....	1,478,749 51	11,753 80	1,490,503 31
	35,117 48		35,117 48
	1,443,632 03	11,753 80	1,455,385 83

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 17, 1907.

7-8 EDWARD VII., A. 1908

B.—STATEMENT of Ordnance Lands Revenue for the Nine Months ended March 31, 1907.

Month.	Amount.	Total.
1906.	\$ cts.	\$ cts.
July.....	175 93	
August.....	581 51	
September.....	565 65	
October.....	683 46	
November.....	1,968 03	
December.....	156 23	
1907.		
January.....	1,248 73	
February.....	188 55	
March.....	1,095 81	
		6,663 90

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

SCHOOL LANDS.

C.—STATEMENT of Receipts on Account of School Lands for the Fiscal Period ended March 31, 1907.

Month.	Manitoba School Lands.	Saskatche- wan School Lands.	Alberta School Lands.	Total.
1906.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.....	9,892 04	24,143 73	3,682 01	37,717 78
August.....	10,729 61	7,547 43	1,025 45	19,302 49
September.....	5,658 19	6,512 33	1,354 36	13,524 88
October.....	13,036 51	31,514 09	12,452 70	59,043 30
November.....	86,494 39	70,759 76	68,112 22	225,366 37
December.....	94,722 82	55,821 59	21,866 39	172,410 80
1907.				
January.....	95,040 14	24,397 17	10,218 77	129,656 08
February.....	9,273 87	15,311 88	12,470 81	37,056 56
March.....	11,619 09	9,517 21	9,139 17	30,275 47
	338,466 66	245,525 19	140,361 88	724,353 73

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

SESSIONAL PAPER No. 25

D.—STATEMENT of Registration Fees for the Nine Months ended March 31, 1907.

District.	Registrar.	Period.	Total fees.
			\$ cts.
Yukon.....	J. E. Girouard.....	9 months.....	2,136 55
Assiniboia.....	F. F. Forbes.....	July 1 to Sept. 7.	18,242 65
North Alberta.....	Geo. Roy.....	"	10,431 90
South Alberta.....	W. R. Winter.....	"	10,336 65
East Saskatchewan.....	S. Brewster.....	"	4,106 50
West Saskatchewan.....	J. W. Hannon.....	"	869 95
			46,124 20

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

E.—STATEMENT of Fines and Forfeitures, Northwest Territories, collected under Dominion Statutes (except 'the Indian Act' and 'The Fisheries Act') for the Nine Months ended March 31, 1907.

Month.	From Whom Received.	Amount.	Total.
1906.		\$ cts.	\$ cts.
July	Attorney General of the province of Saskatchewan	21 00	21 00

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

F.—STATEMENT of Fines Collected under the Immigration Act, for the Nine Months ended March 31, 1907.

Month.	From Whom Received.	Amount.	Total.
1906.		\$ cts.	\$ cts.
November	D. G. Macdonell.....	600 00	
"	G. L. Milne	2,275 00	
			2,875 00

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

7-8 EDWARD VII., A. 1908

G.—STATEMENT of Casual Revenue for Nine months ended March 31, 1907.

Name.	Particulars.	Amount.
		\$ cts.
J. F. Sugrue	Refund acct. balance unexpended <i>re</i> Yukon cheque 7062	3 00
Marine and Fisheries Dept.....	" Seaman Howie's board and medical treatment	15 30
J. A. Bauneriman	Refund proceeds sale of old buggy	20 00
Immigration Commissioner, Winnipeg	Refund acct. W. A. Tucker's railway fare	7 00
"	" sale of old desks to T. J. Saunders	12 60
R. H. Odell	" immigration cheque No. 8490 of July 14, 1906, not used	50 00
Cyril Genik	" balance contingencies to June 30, 1906	50 00
Dr. A. S. Munro	"	21 99
T. G. Rothwell	" travelling expenses	51 40
Howell, Mather & Co	" costs <i>re</i> C.P.R. town sites	1,830 02
W. Ewart	"	1,132 78
Rev. Father Vachon	" passage money advanced in 1905	29 20
Thos. Gellay	" travelling expenses	4 44
"	"	0 60
John Flesher	" proceeds sale of coal	43 60
Immigration Commissioner, Winnipeg	" overpayment by J. M. McGregor, \$5; and P. Morin, \$2	7 00
J. T. Lithgow	" proceeds of sale at Clear Creek	100 00
Immigration Commissioner, Winnipeg	" sale of tents, \$20, and old tin stove, \$1	21 00
High Commissioner, London	" F. O. Chapman, \$2.01; J. Edgar, 12c.; L. & N. W. Ry., \$3.34	5 47
Immigration Commissioner, Winnipeg	" sale of old sheds, \$650; old stove, \$3.90	653 90
"	" railway fare advanced Mrs. Letkenchans	3 00
D. R. Gagnon	" duplicate payment	25 65
A. K. Thom	" salary cheque for December, 1905, not used	175 00
E. Deville	" two days attendance at Bd. D.L.S.	10 00
Louis Tiel	" immigration cheque No. 6384, not used ..	10 00
Jno. A. Blondal	" immigration expenses	2 68
Agriculture Dept	To recoup department for horse used by W. R. Ridington ..	83 33
W. W. B. McInnes	Refund acct. travelling expenses	902 65
W. N. A. Deyl	" salary cheque for Oct., 1905, not used ..	65 00
Jno. A. Shaw	" immigration cheque No. 6045, not used ..	11 00
A. L. Robertson	" sale of old buggy	10 00
Waghorn's Guide	" subscription for 1905-1906	1 00
G. White-Fraser	" Alaska Boundary Survey, 1905	267 09
F. T. Congdon	" travelling expenses	918 50
Canada Foundry Co.	" cheque No. 1608 <i>re</i> water works at Banff ..	245 84
Immigration Commissioner, Winnipeg	" sale of tents to J. Mooney	29 75
"	" W. E. Holmes	25 50
<i>Casual Revenue, Northwest Territories.</i>		\$ 6,845 29
Commissioner of N. W. Territories ..	Marriage licenses	\$ 8 00
John Moar per Hudson Bay Co.	Liquor permit	2 00
Hudson's Bay Co	"	5 25
"	"	26 00
"	"	32 00
<i>Casual Revenue, Relief Advances.</i>		\$ 1,992 27
Less refunds		11 62
		1,980 65
Relief mortgages	1876	\$ 1,582 89
Seed grain advances	1894	1,957 02
"	1896	528 06
"	1900	336 78
"	1901	886 75
"	1905	1,752 04
		7,044 14
		\$ 15,943 33

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

CHAS. H. BEDDOE,
Accountant.

SESSIONAL PAPER No. 25

H.—STATEMENT showing Seed Grain and Relief Mortgages for the Nine Months ended March 31, 1907.

	Seed Grain Advances 1905.	Seed Grain Advances 1901.	Seed Grain Advances 1900.	Seed Grain Advances 1896.	Seed Grain Advances 1895.	Seed Grain Advances 1894.	Seed Grain to Set- tlers Account 1890.	Territorial Account 1886-87-88.	Relief Mortgages of 1876.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Refunds...	1,803 74 51 70	915 00 28 25	336 78	528 66	1,483 56 49 65	1,957 02	890 25 3 22	1,352 16	1,582 89	10,850 06 132 82
	1,752 04	886 75	336 78	528 66	1,433 91	1,957 02	887 03	1,352 16	1,582 89	10,717 24

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

7-8 EDWARD VII., A. 1908

I.—STATEMENT of Gross Receipts on account of Dominion Lands for the fiscal period ended March 31, 1907.

Month.	Homestead Fees.		Improvements.		General Sales of Land.		Timber Dues.		Rental from Grazing Lands.		Export Tax, Mining Fees, Hay and Coal Lands, &c.		Rocky Mountains Park of Canada.		Map Sales, Office Fees, Sundry Fees.		Survey Fees.		Rental of Lands and Miscellaneous.		Total.	
	\$	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.	%	cts.
1906.																						
July	11,672 00	4,314 75	24,366 36	48,590 00	2,883 35	40,439 35	3,266 23	41,023 90	3,266 23	40,439 35	3,266 23	41,023 90	3,266 23	41,023 90	3,266 23	41,023 90	3,266 23	41,023 90	3,266 23	41,023 90	3,266 23	41,023 90
August ..	33,807 00	4,300 01	18,087 32	36,212 43	2,753 63	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72	1,321 46	37,881 72
September ..	25,805 00	3,412 55	117,362 64	13,941 54	4,786 87	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50	2,275 00	36,996 50
October ..	33,807 00	5,429 16	26,997 31	40,219 82	3,233 81	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95	1,144 25	13,382 95
November ..	29,587 00	4,101 65	48,814 15	23,364 41	7,623 35	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42	637 67	9,521 42
December ..	13,945 00	4,804 35	74,317 48	15,357 88	2,121 55																	
1907.																						
January ..	11,027 00	4,378 69	30,248 58	70,382 21	5,683 06	11,138 77	2,992 60	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21	1,298 54	8,609 21
February ..	10,247 00	4,100 49	54,407 60	72,296 26	2,829 06	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21	740 54	8,609 21
March ..	15,592 55	4,891 95	99,555 15	53,081 68	11,794 23	11,838 77																
Strip	215,449 55	39,763 63	494,117 12	379,476 32	43,711 91	213,892 59	15,883 51	6,538 57	50,962 03	18,994 28	1,478,719 51	11,753 80	1,490,503 31									
	215,449 55	39,763 63	505,467 01	379,476 32	44,111 91	213,892 59	15,887 42	6,538 57	50,962 03	18,994 28	1,478,719 51	11,753 80	1,490,503 31									

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

CHAS. H. BEDDOE,
Accountant.

SESSIONAL PAPER No. 25

DOMINION LANDS REVENUE.

J.—STATEMENT of Gross Receipts (cash and scrip) on account of Dominion Lands Revenue for the Fiscal Period of Nine Months ended March 31, 1907, compared with the Fiscal Year 1905-1906.

Particulars.	Fiscal period March 31, 1907. Nine months.	Fiscal Year 1905-1906. Twelve months.	Increase.	Decrease.	Net Decrease.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dominion Lands Agencies.....	755,103 40	893,980 82	.....	138,877 42	.....
Crown Timber Agencies.....	363,743 74	272,046 84	91,696 90	.....	.....
Rocky Mountains Park of Canada.....	15,887 42	18,883 83	.....	2,996 41	.....
Hay, mining, coal and grazing lands ..	53,054 36	58,099 17	.....	5,044 81	.....
Miscellaneous	72,623 86	131,326 56	.....	58,702 70	.....
	1,260,412 78	1,374,337 22	91,696 90	205,621 34	.....
Yukon Territory.....	230,090 53	334,978 06	.....	104,887 53	.....
	1,490,503 31	1,709,315 28	91,696 90	310,508 87	218,811 97

CHAS. H. BEDDOE,
Accountant.

DEPARTMENT OF THE INTERIOR,
ACCOUNTS BRANCH,
OTTAWA, June 15, 1907.

No. 20.

REPORT OF THE REGISTRAR.

DEPARTMENT OF THE INTERIOR,
CORRESPONDENCE REGISTRATION BRANCH,
OTTAWA, April 9, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to place before you statement 'A,' showing the number of letters filed during the nine months ended March 31, 1907, and the amount of money received, registered and sent to the accountant; also statement 'B,' showing the number of letters and the amount of money received during each of the fiscal years 1900 to 1907.

Your obedient servant,

J. M. ROBERTS,
Chief Clerk.

7-8 EDWARD VII., A. 1908

A.—STATEMENT showing the Number of Letters received and recorded and the Money received during the Nine Months ended March 31, 1907.

Month.	Letters Received.	Daily Average.	REGISTERED LETTERS		Money Received.
			Received.	Sent.	
1906.					\$ cts.
July.....	22,210	888	695	2,626	103,190 07
August.....	21,078	811	762	2,147	57,374 04
September ..	15,635	680	646	2,620	226,497 07
October.....	17,860	687	690	3,159	184,317 50
November.....	15,135	605	795	3,728	256,030 36
December.....	14,860	644	808	2,431	219,594 83
1907.					
January.....	15,204	583	716	3,831	123,935 19
February.....	14,020	653	748	3,631	103,351 21
March.....	14,460	580	880	2,968	63,490 67
Total.....	150,462	.....	6,740	26,541	1,337,780 94

J. M. ROBERTS,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
CORRESPONDENCE REGISTRATION BRANCH,
OTTAWA, April 9, 1907.

B.—STATEMENT showing the Number of Letters received and recorded and the Money received during each of the Years 1900 to 1906, inclusive, and the Nine Months ended March 31, 1907.

Fiscal Year.	Letters Received and Recorded.	Money Received.
		\$ cts.
1900	48,663	200,831 71
1901.....	67,860	333,534 02
1902.....	67,722	382,999 87
1903.....	87,851	629,585 47
1904.....	113,074	630,355 44
1905.....	135,908	528,219 76
1906.....	176,729	875,933 54
1907	150,462	1,337,780 94

J. M. ROBERTS,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
CORRESPONDENCE REGISTRATION BRANCH,
OTTAWA, April 9, 1907.

No. 21.

REPORT OF THE GEOGRAPHER.

DEPARTMENT OF THE INTERIOR,
OFFICE OF GEOGRAPHER,

OTTAWA, March 31, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to report as follows on the work of my office for the past year.

The staff at present is as follows:—

J. E. Chalifour, chief draughtsman.
H. E. Baine, draughtsman.
H. Tache, draughtsman.
W. Anderson, draughtsman.
J. Beveridge, draughtsman.
F. Inkster, draughtsman.
H. M. Blatchly, draughtsman.
G. E. Dumouchel, draughtsman.
Jas. K. Bennie, draughtsman.
R. W. Craig, draughtsman.
C. G. Wood, draughtsman.
A. M. Darrach, draughtsman.
H. W. Wilson, draughtsman.
A. Groulx, draughtsman.
A. Blue, draughtsman.
S. Chandler, draughtsman.
A. Akerlindh, in charge of maps and plans.
Mrs. D. E. Waine, stenographer.
J. L. Merrifield, messenger.

Mr. M. W. Sharon resigned September 15, to accept a more lucrative position under the provincial government of Saskatchewan.

Mr. J. P. McElligott also resigned September 11, to accept a position on the National Transcontinental Railway.

Mr. A. Blue was appointed July 23, and has since been employed on the preparation of material for a second edition of the 'Altitudes' in Canada.

Mr. F. Inkster was appointed February 9, in connection with the compilation of the British Columbia sheets of the Standard $\frac{1}{600,000}$ map.

Mr. J. Beveridge was appointed February 9, to succeed Mr. M. W. Sharon, and has continued his work on the maps of the western provinces.

Messenger S. B. Roach resigned August 31, and was succeeded by Mr. W. P. Lochnan, who was appointed September 5, and transferred September 19. On September 29 J. D. Gamache was appointed, and on November 9 his services were dispensed with. On November 27 J. D. Merrifield was appointed to the vacancy.

During the year good progress was made, especially with the sheets of the Standard $\frac{1}{250,000}$ maps, and at the time of writing, 7 of these large sheets are well advanced toward completion.

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The first editions of my 'Altitudes in Canada' and 'Dictionary of Altitudes' are nearly exhausted, and as much railway levelling has been done since their publication, I have commenced the compilation of this new material, preparatory to publishing a new edition. This publication has been very useful to engineers and others, and I am informed by Mr. Butler, Deputy Minister, Department of Railways and Canals, and late Assistant Chief Engineer of the National Transcontinental Railway, that it saved the government 'thousands of dollars' in connection with their preliminary surveys. They were working to secure a line with the low maximum grade of four-tenths of one per cent—21 feet per mile—against east-bound traffic. Knowing, from my 'Altitudes,' the elevation of Edmunston, N.B., and other points, above mean sea-level, they were able to work in any direction with perfect confidence, as all the elevations thus obtained were absolute elevations above a common datum.

After many delays, the Atlas of Canada is now completed and in the hands of the binders, who are now making delivery, in instalments. Of the total edition of 6,000 copies, 2,000 are being bound as a preliminary edition, though it is certain that the demand will necessitate a further order. It is a unique publication as regards Canada, and no other country, except Finland, has issued a similar work, though the Census Atlases of the United States give similar—though more detailed—graphic representations of the information obtained by the Census Bureau.

During the year a number of maps were prepared for other departments.

A map showing the progress of the National Transcontinental Railway up to June 30, last, was transferred from portions of the plates of the large map of the Dominion.

For the Department of Agriculture:—

Maps showing the population, by townships and parishes, in 1901 and in 1906, in (a) Manitoba, (b) Saskatchewan and (c) Alberta were prepared from the plates of the map of western Canada and were of material assistance in connection with the redistribution of the representation of Saskatchewan and Alberta. A second edition giving the same information respecting the population and showing the new constituencies will be issued at an early date.

A map in three sheets, showing 'Cheese Factories, Creameries and Combined (cheese and butter) Factories' in Canada is now in preparation. It will bring out, in a marked manner, the concentration of manufactories of cheese and butter in certain districts.

For the Royal North-west Mounted Police Department three maps have been prepared, viz.:—

1. Map showing territorial division of Canada.
2. Map showing Mounted Police patrols, posts and districts in Alberta and Saskatchewan.
3. Map showing Mounted Police patrols, posts and districts in northwestern Canada.

These maps show the vast area patrolled by this small force.

On September 8 I left for the west, with the Canadian Society of Civil Engineers' excursion. Arriving in Winnipeg on the 10th, we inspected the new yard of the Canadian Pacific—one of the largest yards for a single railway, in America—the Canadian Pacific repair shops and the waterworks water-softening plant. The last-named plant removes upwards of 90 per cent of the solids contained in the water in its natural state—100 parts of solids in 100,000.

On the 12th we visited the Canadian Pacific Irrigation works, near Calgary. At this point the railway company owns a solid block of 3,000,000 acres, 1,100,000 acres of which are irrigable. The western section, the only one thus far developed, contains about 1,000,000 acres, of which 350,000 acres are irrigable. The water for this section is carried through the main canal, 17 miles long, 60 feet and 120 feet wide at bottom and water line, respectively, and 10 feet deep, to the main reservoir and thence through

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secondary canals, 30 feet wide at bottom and 8 feet deep; aggregate length of the secondary canals, 150 miles.

On the 13th the Bankhead mines were visited. At this point, the Canadian Pacific is mining an excellent quality of coal, a semi-anthracite. As the 'breaker' breaks a considerable proportion of the coal to small sizes, the company was erecting a very complete and thoroughly up-to-date briquetting plant and expected to shortly place on the market an excellent fuel in the form of anthracite briquettes.

On the 15th the Barnett saw-mill, near Vancouver, was inspected in the morning, and in the afternoon we visited the works of the Vancouver Power Co., on the north arm of Burrard inlet. Water is taken from the main reservoir—Coquitlam lake—432 feet above the sea—through a tunnel to Buntzen lake, and thence by three pipe lines to the power house where it is delivered with a head of about 410 feet.

On the 17th a visit was paid to the Esquimalt graving dock. As a tramp steamer of 4,000 tons, that had gone ashore a few days previously, occupied the dock, we were able to see to great advantage the effect on the plates.

On the 19th we visited a fine fruit 'ranch' near Nelson, and later, the Nelson 'fair.' At the latter the fruit exhibits showed the great capabilities of the country in that line, and we were informed that the market in Alberta, Saskatchewan and Manitoba could absorb all that they could produce, and more. The Hall smelter was also visited. It contains two blast furnaces which, in 1906, smelted 37,767 tons of ore, which produced 7,630 tons of lead bullion carrying 116,500 ozs. silver and 8,163 ozs. gold, and valued at \$1,215,943. This smelter has not been able to compete with the more modern plants, but the company is installing the Huntington-Heberlein process, and expects to cut down costs to a figure that will be profitable and at the same time as low a figure as its competitors.

On the afternoon of the same day, a short run took us to Bonnington falls. At this point the West Kootenay Power and Light Co. has had, at the lower falls a 4,000 h.p. plant which has long since proved inadequate. At the upper falls, the new plant—since completed—was under construction. The operating head of the wheels at the upper falls, is 80 feet, and there are four main units of 8,000 h.p. each. The electric energy is transmitted to Rossland, Trail, Phoenix, Grand Forks, Greenwood, &c.

On the 20th the Le Roi and Centre Star mines, Rossland, were visited. The former is down 1,750 feet and since 1898 has produced 1,100,000 tons of ore, yielding upwards of 19½ tons (avoirdupois) gold, 22½ tons silver and nearly 16,000 tons copper. At the annual meeting in November last, the managing director stated that during the year the mine had made a profit of \$185,000. The product of the Rossland camp up to the end of 1905, has been estimated at \$34,000,000.

On the afternoon of the 20th, the smelting works of the Consolidated Mining and Smelting Co., at Trail, were visited. This company also owns the Centre Star-War Eagle, St. Eugene, Snowshoe, and other mines, all of which were shipping ore to Trail. The Le Roi was also sending most of its ore under a contract which has since been abrogated. The smelter contains four copper furnaces, 42 x 180 inches, and a much larger one—42 x 270—was under construction. In the lead smelting department the Huntington-Heberlein process was being installed. The plant in the lead refinery was being enlarged from a capacity of 25 tons per day to 75.

In 1906, this plant smelted 227,000 tons of ore, producing 82,000 ozs. gold, 1,360,000 ozs. silver, 6,640 tons lead and 2,264½ tons copper. The gold is shipped to the United States, refined silver and lead to China and Japan, pig lead to the Montreal corrodng works, sheet lead and lead pipe to all parts of Canada.

On the morning of the 22nd we visited the Granby mines, at Phoenix. These mines have produced 3,000,000 tons of ore, much of it from quarries, in places 400 feet wide; production in 1906, 80,404 tons of ore carrying about 30 lbs. of copper and \$2 in gold, to the ton. As a result of the present high price of copper, immense bodies of low grade ore that were left in the walls will now be mined. The mines have a capacity of 5,000 tons per day, but the output has been limited by the capacity of the

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smelter, to about 3,000 tons. Since our visit, however, the enlargements then in progress have increased its capacity to about 4,000 tons daily.

In the afternoon we proceeded to Greenwood to visit the smelters of the Dominion Copper Co. and of the British Columbia Copper Co. The latter was under enlargement from two furnaces, with a capacity of 550 tons daily to three modern furnaces with an aggregate capacity of 2,000 tons daily. In the new converter plant the molten matte will be blown into blister copper 99 per cent fine; this plant will also convert the matte from the Dominion Copper Co.'s smelter at Boundary falls.

On the 23rd we visited the Granby smelter at Grand Forks. This, the largest smelter in Canada, contains 8 blast furnaces; has a capacity of 2,700 tons per day, and is equipped to produce 2,500,000 lbs. of copper, monthly. In 1906, it smelted 838,847 tons. The approximate output of all the mines of the Boundary district, in 1906, was 1,159,000 tons, as compared with 97,000 tons in 1900—when shipments were commenced. Estimating that the ore carries on an average 25 to 30 lbs. of copper to the ton, these mines have produced about 70,000 tons of copper which, with the gold and silver values, is worth about \$25,000,000.

On the 24th a short stop was made at Moyie to allow us to see the concentrating plant of the St. Eugene mine, the largest silver-lead mine in Canada. In the first six months of 1906 this plant milled 84,066 tons of ore. From these concentrates, and from 1,489 tons of crude ore, about 418,000 ozs. of silver and 17,300,000 lbs. lead of a total value of \$798,660 were extracted.

On the 25th we visited the mines of the International Coal and Coke Co., at Coleman. These mines are producing about 1,200 tons of coal per day. The greater portion is shipped, only about one-tenth being converted into coke. They had about 100 beehive coke ovens and were adding 90 more. Production in 1906, 334,230 tons of coal, of which 49,635 tons were sent to the company's ovens and produced 31,066 tons of coke. Owing to shortage of shipping facilities, the mines were only operated on 249 days in the year.

On the afternoon of the 27th we arrived at Fort William, unfortunately, too late to take the train to the Kaministiquia Power Co.'s 25,000 h.p. electric power plant at Kakabeka falls.

We visited the grain elevators at Fort William and at Port Arthur, also the site of the proposed Grand Trunk Pacific terminal. Capacity of Fort William elevators 9,000,000 bushels; of Port Arthur elevators, 7,000,000 bushels.

On the 29th I returned to Ottawa.

During the past year 3,300 letters were received and 4,063 sent out, also 89,243 maps and books received and 52,594 sent out.

Appended hereto are lists of maps and reports published and of maps in progress.

I have the honour to be, sir,

Your obedient servant,

JAMES WHITE,

Geographer.

MAPS PUBLISHED.

Dominion of Canada and Newfoundland, eight sheets, each 25 inches by 26 inches; extends from the Atlantic to the Pacific and from Maryland and Oregon on the south, to Cumberland sound and Herschell island, on the north. Scale 35 miles to 1 inch.

Dominion of Canada and Newfoundland, 16 inches by 36 inches. Scale 100 miles to 1 inch.

Dominion of Canada. Scale 58 miles to 1 inch.

Relief map of Canada. Scale 100 miles to 1 inch.

Resource map of Canada. Scale $\frac{1}{2}$ 2,500,000 miles to 1 inch.

SESSIONAL PAPER No. 25

Water-power map, average rainfall at principal points in Canada. Scale 100 miles to 1 inch.

National Transcontinental Railway map, shows route of the National Transcontinental Railway, Moncton to Pacific. Scale 100 miles to 1 inch.

Explorations in northern Canada and adjacent portions of Greenland and Alaska. Scale 75 miles to 1 inch.

Rocky mountains—Banff sheet—contoured map of mountains in the vicinity of Banff. Scale 2 miles to 1 inch.

Rocky mountains—Lake Louise sheet—contoured map of mountains in the vicinity of Laggan and Field. Scale 2 miles to 1 inch.

Manitoba, Saskatchewan, Alberta and southwestern portion of Keewatin; three sheets, each 25 inches by 36 inches. Scale $12\frac{1}{2}$ miles to 1 inch.

Index map showing townships in Manitoba, Saskatchewan and Alberta, plans of which have been printed. Scale 35 miles to 1 inch.

General map of the northwestern part of the Dominion of Canada. Edition of 1898. In 2 sheets. Scale 35 miles to 1 inch.

Map showing railways in Manitoba, Alberta and Saskatchewan. Scale 35 miles to 1 inch.

Manitoba. Scale $12\frac{1}{2}$ miles to 1 inch.

Regina land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Red Deer land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Calgary land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Estevan land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Winnipeg land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Lethbridge land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Edmonton land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Dauphin land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Yorkton land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Prince Albert land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Battleford land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Moosejaw land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Brandon land district. Scale $12\frac{1}{2}$ miles to 1 inch.

Peace River district—Northern Alberta—includes the country between Wetaskiwin and Lake Athabaska, and between Athabaska river and the eastern boundary of British Columbia. Scale $\frac{1}{500,000}$, or 12·63 miles to 1 inch.

Map showing electoral divisions (for provincial legislature) in Southern Saskatchewan. Scale $12\frac{1}{2}$ miles to 1 inch.

Map showing electoral divisions (for provincial legislature) in Southern Alberta. Scale $12\frac{1}{2}$ miles to 1 inch.

Map showing all the even-numbered sections patented to January 1, 1907, and all even-numbered sections homesteaded and unpatented or finally allotted to railway companies to that date, in Manitoba, Saskatchewan and Alberta, 3 sheets. Scale $12\frac{1}{2}$ miles to 1 inch.

British Columbia 'Railway Belt' map, showing the 'Railway Belt' in British Columbia. Scale $\frac{1}{500,000}$, or 7·89 miles to 1 inch.

Southeastern Alaska and portion of British Columbia. Edition of 1897. Scale $\frac{1}{960,000}$.

Southeastern Alaska and portion of British Columbia, showing award of Alaska Boundary Tribunal, October 20, 1903. Scale $\frac{1}{960,000}$.

Yukon—Extends from Lynn canal on the south, to Eagle on the north, and from the Pacific to the Frances river. Scale $\frac{1}{750,000}$, or 11·82 miles to 1 inch.

White, Alsek and Kluane rivers district, southwestern Yukon. Scale $\frac{1}{400,000}$, or 6·31 miles to 1 inch.

Timiskaming sheet, Pontiac county, Quebec, and Nipissing district, Ontario. Scale $\frac{1}{750,000}$, or 11·83 miles to 1 inch.

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Sheet 1 S. W. Ontario—Windsor sheet—Essex, Kent and Lambton and portions of Elgin, Middlesex and Huron counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 1 S. E. Ontario—London sheet—Norfolk, Oxford, Brant and portions of Elgin, Middlesex, Huron, Perth, Waterloo and Wentworth counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheets 1 N. W. and 1 N. E. Ontario—Guelph sheet—Wellington, Grey, Bruce and portions of Huron, Perth, Waterloo, Halton, Dufferin and Simcoe counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 2 S. W. Ontario—Hamilton sheet—Lincoln, Welland, Haldimand and portions of Wentworth and Halton counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 13—includes whole of New Brunswick, with exception of Madawaska and portions of Westmoreland and Albert counties. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 27, Ontario—Lake of the Woods sheet—Rainy River district and portions of Thunder Bay district and Keewatin. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 11—Montreal sheet—Includes the country between Quebec and Vaudreuil, and between the international boundary line and latitude 48° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 14 S. E.—Truro sheet—Includes Pictou, N.S., King's and Queen's, P.E.I., and portions of Halifax, Guysborough and Colchester, N.S. Scale $\frac{1}{250,000}$ miles to 1 inch.

Sheet 15—Cape Breton Island and portions of Antigonish and Guysborough counties, N.S. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 28, Ontario—Thunder Bay sheet—Includes portions of Thunder Bay and Rainy River districts. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 29, Ontario—Lake Nipigon sheet—Includes central portion of Thunder Bay district. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 30, Ontario—White River sheet—Includes portions of Algoma and Thunder Bay districts. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 41, British Columbia—Prince Rupert sheet—Includes portions of the province between longitude 128° W. and 131° W. and between latitude 52° N. and 55° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 42, British Columbia—Babine Lake sheet—Includes portion of the province between longitude 125° W. and 128° W., and between latitude 52° N. and 55° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 43, British Columbia—Fort George sheet—Includes portion of the province between longitude 122° W. and 125° W., and between latitude 52° N. and 55° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 44, British Columbia—Tete Jaune Cache sheet—Includes portions of the province between longitude 119° W. and 122° W., and between latitude 52° N. and 55° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Sheet 45, British Columbia—Jasper House sheet—Includes portions of the province between longitude 116° W. and 119° W., and between latitude 52° N. and 55° N. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Rocky mountains between the Canadian Pacific Railway and the North Saskatchewan. Scale 4 miles to 1 inch.

Railway Belt Homestead map—British Columbia—Includes southern portion of the province between longitude 116° and 123° W. on the east and west, respectively, and between latitude 49° and 52° on the south and north, respectively. Shows lands in the 'Railway Belt' that have been alienated by homesteading, sale, &c. Scale $\frac{1}{500,000}$, or 7.89 miles to 1 inch.

Odd-section map—Manitoba, Saskatchewan and Alberta—shows odd-numbered sections in these provinces that have been alienated as railway land grants, &c. Scale $12\frac{1}{2}$ miles to 1 inch.

SESSIONAL PAPER No. 25

ATLAS OF CANADA—MAPS.

1. Territorial divisions.
2. Relief map, west sheet.
3. Relief map, east sheet.
4. Geology, west sheet.
5. Geology, east sheet.
6. Minerals, west sheet.
7. Minerals, east sheet.
8. Forests.
9. Limits of trees.
10. Telegraphs—Quebec and maritime provinces.
11. Telegraphs—Ontario and Quebec.
12. Telegraphs—Manitoba, Saskatchewan and Alberta.
13. Telegraphs—British Columbia, Yukon and Alberta.
14. Telephones—Maritime provinces and Quebec.
15. Telephones—Ontario and Quebec.
16. Telephones—Manitoba, Saskatchewan, Alberta, British Columbia.
17. Railways—Quebec and maritime provinces.
18. Railways—Ontario and Quebec.
19. Railways—Manitoba, Saskatchewan and Alberta.
20. Railways—British Columbia, Alberta and Yukon.
21. Transcontinental railways.
22. Canals, lighthouses and sailing routes—St. Lawrence and Great Lakes.
23. Lighthouses and sailing routes—Pacific coast.
24. Lighthouses and sailing routes—Atlantic coast.
25. Isotherms for months of year.
26. Isotherms for summer and year; precipitation, snowfall and Isobars.
- 26a. Average possible hours of sunshine in summer months, and temperature maps.
27. Density of population—maritime provinces and Quebec.
- 27a. Density of population—Ontario and Quebec.
28. Density of population—Manitoba and Saskatchewan.
- 28a. Density of population—British Columbia and Alberta.
29. Aborigines of Canada, Alaska and Greenland.
- 29a. Origins of the people—maritime provinces and Quebec.
- 29b. Origins of the people—Ontario and Quebec.
- 29c. Origins of the people—Manitoba and Saskatchewan.
- 29d. Origins of the people—British Columbia and Alberta.
30. International and interprovincial boundaries (a) Eastern Canada-United States; (b) New Brunswick-Quebec; (c) Quebec-Labrador.
31. Interprovincial boundary—Ontario-Manitoba.
- 31a. International boundary—British Columbia and Yukon-Alaska.
32. Routes of explorers.
33. Drainage basins.
34. Montreal.
35. Toronto.
36. Quebec, St. John.
37. Winnipeg.
38. Vancouver, Ottawa.
39. Hamilton, London, Halifax.

DIAGRAMS.

40. Trade and Commerce—Exports.
41. Trade and Commerce—Imports.
42. Trade and Commerce—Exports, principal items.

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43. Trade and Commerce—Imports, principal items.
44. Trade and Commerce—Imports per head, duty, increase of trade.
45. Minerals, telegraphs.
46. Population according to (a) age and sex; (b) sex and conjugal condition.
47. Population according to age, sex and conjugal condition.
48. Population (a) proportion of British and foreign born; (b) Birthplace of native population; (c) areas of provinces and territories.
49. Population (a) origins; (b) religions; (c) birthplaces.
50. Population (a) interprovincial immigration; (b) proportion of population; (c) density of population; (d) rural and urban.
51. Population, from earliest records to 1901, in Ontario, Manitoba, British Columbia, Alberta, Saskatchewan, other territories.
52. Population from earliest records to 1901, in Quebec, Nova Scotia, New Brunswick, Prince Edward Island.
53. Population—Cities and towns with a population of upwards of 7,000.
54. Population—Cities and towns with a population of upwards of 7,000.
55. Population—Cities and towns with a population of upwards of 7,000.
56. Agriculture—Value of land, &c.; of farm products; number of farmers and classification of farm area.
57. Agriculture—Improved and unimproved area; value of farm property.
58. Agriculture—Size of farms; number of farms; value of agricultural products.
59. Agriculture—Number of (a) sheep, (b) horses, (c) cattle.
60. Agriculture—Value of crops, live stock, dairy produce, &c.
61. Agriculture—Production of grains, &c.
62. Agriculture—Principal crops of Ontario.
63. Agriculture—Principal crops of Manitoba.
64. Manufactures—Capital invested; number of wage-earners; value of products.
65. Manufactures—Proportion of population; value of product, by provinces.
66. Vital statistics—(a) blind, (b) deaths.
67. Vital statistics—(a) insane, (b) deaf and dumb.
68. Finance—Revenue.
69. Finance—Expenditure.
70. Finance—Debt; expenditure for public works; assets.
71. Currency and Banking—Savings banks, deposits and withdrawals.
72. Currency and Banking—Chartered banks, liabilities, assets, deposits, loans and reserve fund.
73. Currency and Banking—Chartered banks, capital, deposits, liabilities and assets.
74. Marine—Light stations, &c.; vessels entered, 1903.
75. Marine—Vessels arrived and departed; coasting vessels.
76. Marine—Sea-going shipping; vessels on inland waters.
77. Marine—Vessels in coasting trade, by provinces.
78. Fisheries—Yield; fishermen; value of vessels, &c.; fish exports.
79. Railways—Capital; passengers; freight; mileage.
80. Railways—Earnings; working expenses; receipts; expenditure.
81. Railways—Train mileage; rolling stock; passengers; freight.
82. Government railways—Expenditure and revenue; earnings and operating expenses; receipts.
83. Education, Immigration—Literate and illiterate; schools, teachers, pupils; expenditure; number of immigrants.

REPORTS.

Altitudes in the Dominion of Canada. With a relief map of North America. 8vo., pp. 226.

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Dictionary of altitudes in the Dominion of Canada. With a relief map of Canada. 8vo., pp. 143.

MAPS IN PROGRESS.

Railway map of Canada. Scale 100 miles to 1 inch.

Sheet 2 N. W. Ontario—Toronto sheet—Peel, York, Ontario and Victoria and portions of Halton, Simcoe, Dufferin, Muskoka, Durham and Peterborough counties. Scale $\frac{1}{250,000}$ miles to 1 inch.

Sheet 2 N. E. Ontario—Belleville sheet—Northumberland and Prince Edward and portions of Durham, Peterborough, Hastings and Lennox and Addington counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 3 N. W. Ontario—Kingston sheet—Includes Leeds and Grenville and portions of Hastings, Addington, Renfrew, Frontenac and Lanark counties. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 9 S. W.—Parry Sound sheet—Includes portions of Muskoka, Parry Sound, Nipissing and Haliburton districts.

Sheet 9 S. E., Ontario and Quebec—Pembroke sheet—Includes portions of Hastings, Addington, Renfrew, Haliburton and Nipissing, Ont., and of Pontiac county, Quebec. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 9 N. W.—Timagami sheet—Includes the country between Lake Nipissing and the Height-of-Land. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 10 S. E.—Cornwall sheet—Includes Dundas, Prescott and Russell counties, Ont., and Vaudreuil and Soulanges and portions of Argenteuil and Ottawa counties, Que. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

Sheet 10 S. W., Ontario and Quebec—Ottawa sheet—Includes portions of Carleton, Lanark, Frontenac, and Renfrew counties, Ont., and of Ottawa and Pontiac counties, Quebec. Scale $\frac{1}{250,000}$, or 3.95 miles to 1 inch.

No. 22.

REPORT OF THE SCHOOL LANDS BRANCH.

DEPARTMENT OF THE INTERIOR,

SCHOOL LANDS BRANCH,

OTTAWA, June 19, 1907.

W. W. CORY, Esq.,

Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to report as follows in regard to the business of the School Lands Branch of the department for the fiscal nine months ending March 31, 1907.

SALES.

In view of the demand for school lands in Manitoba it was decided to offer for sale during the autumn of 1906, the undisposed of school lands in the portion of the province lying west of range 15 and south of township 19.

The lands were inspected and valued by Mr. Ingram and Mr. Potts, the School Lands Inspectors, for the purpose of determining the upset price to be placed on each parcel, and the necessary authority for holding the sales was given by order in council of August 31, 1906.

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For the greater convenience of the public it was decided to hold the sales at fourteen different points in the portion of the province before described, and which points were so chosen that all the lands offered were within easy distance of some one of the points of sale.

In addition to these fourteen sales, two smaller ones were held earlier in the season, namely, one at Winnipeg on September 11, 1906, comprising certain water-powers on the Winnipeg river and a gravel pit near Winnipeg, and the other at Roseisle on September 18, 1906.

The following statement shows the results of these sales:—

Place of Sale.	Date of Sale.	Area offered in acres.	Area sold.	Amount realized.	Average price per acre realized.
	1906.			\$ cts.	\$ cts.
Winnipeg.....	September 11....	1,323'00	1,243'00	38,755 00	31 18
Roseisle.....	" 18.	3,520'00	2,077'00	17,618 00	8 48
Killarney.....	October 23....	14,130'72	9,693'98	104,792 54	10 80
Deloraine.....	" 25.	11,333'25	6,380'25	96,865 90	15 18
Melita.....	" 27.	22,872'84	17,432'84	247,495 16	14 20
Hartney.....	" 30.	8,794'22	4,338'22	46,473 19	10 71
Reston.....	November 1....	17,444'86	10,880'00	122,040 00	11 22
Brandon.....	" 3.	8,932'84	6,751'44	104,598 07	15 49
Wawanesa.....	" 6.	8,621'78	4,945'79	56,173 73	11 36
Virden.....	" 8.	17,509'78	11,139'75	112,620 13	10 10
Minota.....	" 13.	16,810'59	10,776'09	122,772 89	11 39
Oak River.....	" 15.	7,407'20	6,700'81	103,250 31	15 41
Strathclair.....	" 17.	18,357'02	12,560'72	141,989 32	11 31
Birtle.....	" 20.	17,035'82	7,387'86	78,018 19	10 56
Minnedosa.....	" 24.	14,265'40	7,423'63	77,296 87	10 41
Rapid City.....	" 24.	5,355'60	5,355'60	55,787 05	10 41
Total.....		193,714 91	125,086 98	1,526,546 35	12 20

In addition to the foregoing, certain town lots were sold at the Rapid City sale for \$964.

The only auction sale in Saskatchewan during the fiscal nine months was held at Strassburg on October 12, 1906. The result was as follows:—

Area offered, 12,601'40 acres; area sold, 11,801'40 acres; amount realized, \$173,155.15; average price per acre, \$14.67.

No auction sales were held in Alberta.

GRAZING LEASES.

The number of grazing leases issued in the three provinces during the nine months was as follows:—

Manitoba.....	23
Saskatchewan.....	149
Alberta.....	139

Total..... 311

The total revenue from this source for the fiscal period for the three provinces was \$12,365.13.

COAL LEASES.

Twelve new coal leases were issued, all of which were for lands in the province of Alberta, covering 3,156 acres. The revenue from coal leases in Alberta for the fiscal nine months was \$1,009.25, and in Saskatchewan \$179.10.

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TIMBER.

The revenue from this source for the nine months was as follows:—

Manitoba.. . . .	\$1,893 75
Saskatchewan.. . . .	143 75
Alberta.. . . .	1,107 43

Attached hereto are three statements, marked respectively A, B and C, showing duly classified the revenue from each province for the fiscal period. From these statements it will be seen that the total net revenue from the three provinces for the fiscal nine months was as follows:—

Manitoba.. . . .	\$337,010 22
Saskatchewan.. . . .	244,830 99
Alberta.. . . .	140,023 67

Total.. . . .	\$721,864 88
---------------	--------------

Attached hereto are also three statements, marked D, E and F, respectively, showing the balance to the credit of the School Lands Fund of each of the three provinces on March 31, 1907.

In accordance with the orders in council in that behalf, a requisition was made on the Auditor General for the issue of cheques to the provincial treasurers of Manitoba, Saskatchewan and Alberta for the amount of the revenue from the school lands within the provinces for the fiscal period, less the principal moneys of sales, and less also the cost of management, and Finance Department cheques were issued accordingly for the following amounts:—

To the provincial treasurer of Manitoba.. . . .	\$39,572 70
To the provincial treasurer of Saskatchewan.. . . .	45,609 78
To the provincial treasurer of Alberta.. . . .	50,235 88

There has been a great increase in the volume of business in the School Lands Branch during the fiscal period, and not only is the revenue much larger for the fiscal nine months than for the preceding twelve months, being \$721,864.88 for the present fiscal nine months as against \$607,070.13 for the preceding year, but the correspondence has also greatly increased, and will, of course, continue to increase as the country develops. Each new auction sale also adds largely to the work of the branch.

The following is a statement of the work of the branch for the fiscal nine months:—

Letters sent.. . . .	11,442
Leases prepared.. . . .	385
Accounts kept posted.. . . .	6,343
Statements of accounts furnished.. . . .	6,343
Cultivation permits issued.. . . .	9
Number of receipts issued.. . . .	2,327

There is in addition to the above a very large amount of work which cannot be tabulated, especially in connection with the auction sales, which involves a great deal of time and labour.

I have the honour to be, sir,

Your obedient servant,

FRANK S. CHECKLEY,

Chief Clerk.

7-8 EDWARD VII., A. 1908

STATEMENT A—MANITOBA SCHOOL LANDS.

REVENUE from July 1, 1906, to March, 31, 1907, both dates inclusive.

Month.	SALES.		Total.	Cultivation Permits.	Grazing Ranches.	Timber.	Hay.	Coal Fees.	Total.
	Principal.	Interest.							
	\$	cts.	\$	cts.	%	cts.	%	cts.	%
1906.									
July.....	3,714 16		3,704 34		295 72				7,774 22
August.....	6,884 44		10,066 66	60 00	95 00				10,161 66
September.....	3,694 35		5,352 54		76 80				5,629 34
October.....	11,270 71		13,366 51		90 24				13,456 75
November.....	68,988 82		83,696 37		86 80	100 00			83,883 17
December.....	87,821 01		93,313 36		67 20				93,380 56
1907.									
January.....	84,403 66		89,521 33		93 30	50 00			89,664 63
February.....	7,331 87		8,871 11	39 00	45 15			7 00	9,012 26
March.....	6,257 24		8,575 69	129 00	210 75				8,906 41
Transferred to Saskatchewan.....	280,365 26		320,382 07	219 00	1,110 96	150 00		7 00	321,893 03
Agencies.....	533 73		636 63						636 63
Transferred to Dominion Lands.....	279,826 53		319,745 44	219 00	1,110 96	150 00		7 00	321,282 40
Refunds.....	9,301 03		14,246 20	14 00	333 16	1,874 25	942 15		17,409 76
Transferred to Dominion Lands.....	280,127 56		333,491 64	233 00	1,444 12	2,024 25	942 15	7 00	338,642 16
Refunds.....						13 00	162 50		175 50
Transferred to Dominion Lands.....	280,127 56		333,491 64	233 00	1,444 12	2,011 25	779 65	7 00	338,466 66
Refunds.....	1,054 87		1,054 87		263 37	117 50	13 70	7 00	1,456 44
Transferred to Dominion Lands.....	288,072 69		332,036 77	233 00	1,180 75	1,893 75	765 95		337,010 22

DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.FRANK S. CHECKLEY,
Chief Clerk.

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STATEMENT B.—SASKATCHEWAN SCHOOL LANDS.
REVENUE from July 1, 1906, to March 31, 1907, both dates inclusive.

Month.	SALES.		Total.	Cultivation Permits.	Grazing Ranches.	Timber.	Hay.	Coal.	Total.	
	Principal.	Interest.								
	\$	cts.	\$	cts.	\$	cts.	\$	cts.	\$	cts.
1906.										
July.....	22,008 58	1,217 03	23,225 61		305 52		5 50		23,026 63	
August.....	6,219 36	777 18	6,996 54	6 00	388 59		50		7,391 63	
September.....	5,606 16	461 57	6,067 73		376 30			55 40	6,499 43	
October.....	28,175 06	2,082 49	30,257 55	25 00	347 64				30,630 19	
November.....	48,534 56	16,938 95	65,473 51	27 50	290 18			10 00	65,801 19	
December.....	43,125 76	11,171 72	54,297 48		330 61		50	83 70	54,742 29	
1907.										
January.....	17,890 60	5,675 87	23,566 47	17 50	488 95	25	13		24,086 17	
February.....	12,425 09	2,271 47	14,696 56	5 00	307 82		2 20	186 30	15,197 88	
March.....	4,661 49	2,671 04	7,332 53	80 50	918 12			143 70	8,474 85	
Transfer from Manitoba.....	504 54	132 09	636 63							
Agencies.....	189,131 20	43,389 41	232,520 61	161 50	3,873 73	25	21 70	479 10	237,086 89	
	5,037 47	2,258 85	7,296 32		576 23	153 00	531 00		8,536 55	
Transfer fees, Dominion Lands.....	194,188 67	45,658 26	239,846 93	161 50	4,449 96	153 25	552 70	479 10	245,643 44	
						9 25	109 00		118 25	
Refunds.....	194,188 67	45,658 26	239,846 93	161 50	4,449 96	144 00	443 70	479 10	245,525 19	
	475 54	80	476 34	5 40	107 51		44 70		634 20	
	193,713 13	45,657 46	239,370 59	156 10	4,282 45	143 75	389 00	479 10	244,830 99	

DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.FRANK S. CHECKLEY,
Chief Clerk.

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STATEMENT C.—ALBERTA SCHOOL LANDS.
REVENUE from July 1, 1906, to March 31, 1907, both dates inclusive.

Month.	SALES.		Total.	Cultivation Permits.	Grazing Ranches.	Timber.	Hay.	Coal.	Total.
	Principal.	Interest.							
1906.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.....	2,078 87	68 13	2,147 00	.....	394 69	.....	.....	5 00	2,541 69
August.....	52 72	114 00	166 72	.....	673 53	.....	.....	.....	840 25
September.....	471 11	170 75	641 86	.....	430 93	.....	.....	.....	1,072 79
October.....	7,521 57	3,529 64	11,051 21	.....	604 12	.....	.....	.....	11,655 33
November.....	39,641 43	92,291 79	61,933 22	.....	454 16	10 48	.....	298 00	62,685 86
December.....	11,441 31	8,858 84	20,300 15	.....	296 18	.....	.....	.....	20,596 33
1907.									
January.....	5,205 56	4,123 49	9,329 05	.....	334 83	.....	.....	5 00	9,668 88
February.....	6,732 00	2,876 62	9,608 62	.....	417 08	1,015 00	.....	215 40	11,256 10
March.....	5,420 48	2,396 36	8,016 84	.....	739 45	.....	.....	127 00	8,903 29
Agencies ..	78,568 05	44,629 62	123,197 67	.....	4,364 97	1,025 48	.....	650 40	129,238 52
	4,887 63	2,744 13	7,631 76	.....	2,670 35	83 20	429 45	373 85	11,188 61
Transfer fees Dominion Lands.....	83,455 68	47,373 75	130,829 43	.....	7,035 32	1,108 68	429 45	1,024 25	140,127 13
				.....		1 25	64 00	.....	65 25
Refunds.....	83,455 68	47,373 75	130,829 43	.....	7,035 32	1,107 43	365 45	1,024 25	140,361 88
	189 02		189 02	.....	133 39	.....	80	15 00	338 21
	83,266 66	47,373 75	130,640 41	.....	6,901 93	1,107 43	364 65	1,069 25	140,023 67

FRANK S. CHECKLEY,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.

SESSIONAL PAPER No. 25

STATEMENT D.

STATEMENT of revenue and expenditure on account of school lands for the fiscal period ended March 31, 1907.

MANITOBA SCHOOL LANDS.

Particulars.	Dr.		Cr.	
	\$	cts.	\$	cts.
By Balance on July 1, 1906.....			1,352,617	07
Sales..... nine months to March 31, 1907.....			332,936	77
Rental for cultivation.....			233	00
Timber, hay and grazing.....			3,840	45
Interest (on account).....			18,000	00
To cost of management at Ottawa.....		900	00	
Expenses, being salaries, printing, advertising, &c.....		8,464	83	
Interest paid to Manitoba Government.....		18,000	00	
Interest and revenue paid to Manitoba Government.....		39,572	70	
To balance on March 31, 1907.....	1,640,689	76		
	1,707,627	29	1,707,627	29

FRANK S. CHECKLEY,
*Chief Clerk.*DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.

STATEMENT E.

STATEMENT of revenue and expenditure on account of school lands for the fiscal period ended March 31, 1907.

SASKATCHEWAN SCHOOL LANDS.

Particulars.	Dr.		Cr.	
	\$	cts.	\$	cts.
By balance on July 1, 1906.....			385,725	26
Sales..... nine months to March 31, 1907.....			239,370	59
Rental for cultivation.....			156	10
Timber, hay, grazing and coal.....			5,304	30
To cost of management at Ottawa.....		900	00	
Expenses, being salaries, printing, advertising, &c.....		4,608	08	
Interest and revenue paid to Saskatchewan Government.....		45,609	78	
To balance on March 31, 1907.....	579,438	39		
	630,556	25	630,556	25

FRANK S. CHECKLEY,
*Chief Clerk.*DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.

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STATEMENT F.

STATEMENT of revenue and expenditure on account of school lands for the fiscal period ended March 31, 1907.

ALBERTA SCHOOL LANDS.

Particulars.	Dr.		Cr.	
	\$	cts.	\$	cts.
By balance on July 1, 1906.....			214,093	80
Sales..... nine months to March 31, 1907.....			130,640	41
Timber, hay, grazing and coal..... " "			9,383	26
To cost of management at Ottawa..... " "		900	00	
Expenses, being salaries, printing, advertising, &c..... " "		4,008	19	
Interest and revenue paid to Alberta Government..... " "		50,235	88	
To balance on March 31, 1907.....	298,973	40		
	354,117	47	354,117	47

FRANK S. CHECKLEY,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
SCHOOL LANDS BRANCH,
OTTAWA, June 19, 1907.

No. 23.

REPORT ON TIMBER, GRAZING AND IRRIGATION.

DEPARTMENT OF THE INTERIOR,
OTTAWA, July 24, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the report of the Timber, Grazing and Irrigation Branch, for the fiscal nine months ending March 31, 1907.

On July 1, 1906, the Timber and Mines Branch, of which this branch formed a part, was divided under authority of an order in council. The administration of the timber and minerals in the Yukon Territory, together with the minerals throughout the western provinces, was assigned to the Mines Branch; while this branch was charged with the management of timber, grazing and irrigation on Dominion lands in the Northwest Territories and the provinces of Manitoba, Saskatchewan, Alberta and British Columbia.

Notwithstanding the fact that the report herewith presented covers a period of only nine months, a comparison of the revenue from timber, grazing and irrigation within the areas under the jurisdiction of this branch shows an increase of \$79,692.35 over the twelve months of last year.

The revenue derived from timber, grazing, hay and irrigation on Dominion lands for the fiscal nine months which ended March 31, last, amounted to \$410,225.07.

Statement 'A,' showing how this amount is made up, will be found at the end of this report.

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Reports received from the Crown Timber Agents at Calgary, Edmonton, Prince Albert, Winnipeg and New Westminster, showing the revenue collected on Dominion lands within their respective agencies, and other information, are appended hereto.

The reports of the Commissioner of Irrigation and the Inspector of Ranches are also appended.

The total revenue from timber, grazing and irrigation received at the above Crown Timber Agencies, together with the ruling price of lumber and the number of mills in each, may be summarized as follows:—

Agency.	Total Revenue	Average price of lumber per M. ft. B. M. at mills.	Number of mills	
			within Agency.	in operation.
	\$ cts.	\$ cts.		
Calgary.....	17,716 55	20 70	13	9
Edmonton.....	39,175 58	17 50	16	14
Prince Albert.....	24,771 83	19 00	6	6
Winnipeg.....	92,859 37	17 00	29	24
New Westminster.....	185,172 94	16 25	25	18

Saw-mill returns received at this department give the following quantities of building materials as having been manufactured and sold during the nine months within the above mentioned agencies:—

	Manufactured.	Sold.
Sawn lumber.ft. B.M.	141,050,292	128,113,260
Shingles.	60,000	60,000
Shingle bolts.cords	8,698	9,454
Lath.	14,273,300	9,268,500

The quantity of lumber manufactured and sold within each agency will be found in the agents' reports appended hereto.

Seven hundred and thirty licenses were prepared.

The areas under license and permit in the provinces of Manitoba, Saskatchewan and Alberta, in the Northwest Territory, and within the Railway Belt in the province of British Columbia, on March 31, 1907, were as follows:—

	Under License. sq. mls.	Under Permit. sq. mls.
Manitoba.	1,217·76	530·94
Alberta.	2,651·93	58·96
Saskatchewan.	2,228·59	507·91
Northwest Territory.	247·70	
British Columbia.	1,953·35	29·16
Total.	8,299·33	1,126·97

The number of applications to cut timber received during the nine months was 380; the number of berths granted was 49. The total number of berths under license is 720. The number of berths covered by permits is 62. The number of portable saw-mill berths granted under order in council of February 19, 1907, is 20.

GRAZING LANDS.

The total number of leases in force is 787, including a total area of 3,002,505 acres, distributed as follows:—

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	Acres.
Province of Manitoba..	6,688
Province of Saskatchewan..	899,765
Province of Alberta..	1,651,397
Railway Belt, B.C..	444,655
	<hr/>
	3,002,505

IRRIGATION.

During the year 42 applications for authority to divert water for irrigation and other purposes were received, and 16 authorizations to construct works in accordance with the provisions of the Northwest Irrigation Act were issued. There were 229 licenses issued up to date to divert water.

OFFICE WORK.

The following is a statement of the office work performed at Ottawa from July 1, 1906, to March 31, 1907:—

Letters received and recorded..	15,464
Letters sent..	14,604
Pages of memoranda and schedule..	7,574
Plans and sketches prepared..	455
Cash receipts issued in quadruplicate..	1,150
Timber—	
Berths applied for..	350
Berths granted..	49
Licenses for timber berths prepared in duplicate..	730
Instructions issued for survey of timber berths..	85
Returns of surveys of timber berths examined..	76
Returns of saw-mills received and verified..	1,495
Permits to cut timber issued by agents, also entered and checked..	6,873
Accounts kept posted..	802
Timber seizures entered and checked..	114
Fireguarding accounts posted..	800
Grazing—	
Applications for grazing lands received..	509
Leases of grazing lands issued..	100
Applications for leases for hay purposes..	13
Accounts kept posted—grazing..	787
Accounts kept posted—hay..	2
Hay permit forms used by the Dominion lands agents, also entered and checked over at this office..	276
Irrigation—	
Applications <i>re</i> irrigation recorded..	42
Memorials examined..	42
Plans examined..	84
Authorizations for construction of ditches issued..	16
Assignments of irrigation applications examined and recorded..	2
Cancellation of irrigation applications issued and recorded..	9
Irrigation licenses issued (in triplicate)..	34

Your obedient servant,

B. L. YORK,
Chief Clerk.

SESSIONAL PAPER No. 25

REVENUE OF DOMINION LANDS.

A.—STATEMENT of receipts on account of timber, grazing, hay and irrigation for the fiscal nine months ending March 31, 1907.

Month.	Timber.	Grazing.	Hay.	Irrigation.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1906.					
July.....	47,160 66	2,983 35	872 05	21 50	51,037 56
August.....	34,553 52	2,786 13	183 55	77 75	37,600 95
September.....	16,306 98	4,786 87	26 35	23 00	21,143 20
October.....	36,237 82	3,233 81	15 50	20 75	39,507 88
November.....	21,923 84	7,623 35	1 00	122 00	29,670 19
December.....	14,492 26	2,124 55	3 50	16 25	16,636 56
1907.					
January.....	69,901 89	5,683 06	2 00	25 76	75,612 71
February.....	71,758 89	2,829 06	50	40 50	74,628 95
March.....	52,087 34	12,244 23	50	55 00	64,387 07
Totals.....	364,423 20	44,294 41	1,104 95	402 51	410,225 07

F. LOYER,

Book-keeper Timber, Grazing and Irrigation Branch.

No. 24.

REPORT OF THE INSPECTOR OF CROWN TIMBER AGENCIES.

OFFICE OF INSPECTOR OF DOMINION CROWN TIMBER OFFICES,
WINNIPEG, MANITOBA, July 2, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa, Ont.

SIR,—I beg to submit the following report in connection with my office as Inspector of Crown Timber Agencies for the nine months ended March 31, last.

During this period the business transacted at seventeen offices, as accounted for in the weekly returns to the department, passed through my hands for purposes of checking. By this arrangement I was kept in close touch with the work, and errors found to have been made were quickly rectified. The returns received by the agents from licensees of timber berths accounting for timber cut also came to me and were carefully checked. Considerable work was entailed in this connection in the shape of correspondence.

I made personal inspection of a number of the timber offices, the reports upon which were duly forwarded to the department.

The offices at Prince Albert, Edmonton, Calgary and New Westminster were inspected during the months of May and June, the work being purposely delayed until after returns had been received from licensees of their cutting during the past winter. Owing to the unprecedentedly heavy snowfall in the provinces of Manitoba and Saskatchewan the lumbermen were greatly hindered in their operations, and this resulted in a much smaller amount of timber being cut than that calculated upon.

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The cutting in the province of Alberta exceeded that of the previous winter, and in British Columbia the output of logs was so great as to glut the market.

The following particulars are given as showing the standing of the timber berths held under Dominion license:—

Provinces.	Areas under License.
Manitoba.....	1,217.76 square miles.
Saskatchewan.....	2,228.59 " "
Alberta.....	2,651.93 " "
Athabaska.....	247.70 " "
British Columbia.....	1,953.35 " "
Total.....	8,299.33 " "

The following particulars are given of the berths in the respective districts, the number being operated upon and the saw-mills in connection therewith.

	No. of Berths.	No. Operated.	No. Saw mills.
Calgary.....	50	24	15
Edmonton.....	122	20	12
Prince Albert.....	79	34	7
Winnipeg.....	137	83	39
British Columbia.....	365	89	24
	753	250	97

From the above showing it will be seen that one-third only of the licensed berths are being worked.

In view of the active demand for lumber material of all kinds throughout the country and the short supply, prices were advanced unduly high by millmen. It is a matter for thoughtful consideration by the department whether in the public interest those licensees who have been holding berths for years past should not be compelled to fulfil the conditions of their license and erect mills and proceed with the manufacture of timber.

I would respectfully refer you to my report made in connection with the Winnipeg Crown Timber Office, in which I give a comparative statement for the years 1905-6 and 1906-7 of the sales of lumber and the prices charged therefor.

Owing to incomplete returns from the lumbermen I am not in a position at this early date to give you figures to show the extent of cutting last winter.

I append hereto a summary statement of the business transacted in connection with timber, mines and grazing during the nine months under review.

Respectfully submitted,

E. F. STEPHENSON,

Inspector Crown Timber Agencies.

SESSIONAL PAPER No. 25

CROWN TIMBER AGENCIES.

A.—SUMMARY of Work Performed during the Nine Months ended March 31, 1907, showing Number of Transactions under various heads and Amount of Revenue Collected.

Agencies.	Bonus.	Ground Rent.	Royalty on Sales.	Timber Limits.	Timber Sozures.	Hay Permits.	Grazing Rents.	Mining Rents.	Coal Lands, Royalty, &c.	Stone Quarries.	Sundries.	School Lands, Hay, Timber and Grazing	Revenues.	Remarks.
													\$ cts.	
Alameda	8	...	44	5	5	...	...	...	...	346 05	
Battleford	130	...	39	2	1	1	...	...	39	318 65	
Brandon	195	...	2	...	...	...	...	...	178	533 50	
Banff	No returns received.
Calgary	7	41	687	11	47	66	18	134	1	5	5	34,963 72	
Dauphin	692	25	44	5	4	...	...	...	3	4,417 12	
Edmonton	1	21	28	1,228	6	49	...	11	232	...	...	51	40,803 22	
Lethbridge	1	276	16	73	90	18	4	...	...	not giv'n	16,749 70	
Minnedosa	Absorbed in Dauphin District, October 1, 1906. No returns.
New Westminster	27	50	32	4	12	1	...	...	...	...	...	25,366 21	
Prince Albert	4	26	1,073	41	13	...	4	45	...	41	...	24,564 21	
Red Deer	420	...	...	16	...	...	...	...	103	1,110 19	
Regina	803	1	77	...	...	...	...	...	not giv'n	1,144 82	
Yorkton	717	...	13	...	...	...	...	2	95	7,952 35	
Winnipeg	25	92	632	22	79	3	41	...	...	...	219	44,562 48	
Mooselaw	Office opens after March 31, 1907.
Humboldt	14	110 00	
Kamloops	108	...	2	167	...	1	5,104 81	
													208,077 13	

E. F. STEPHENSON,
Inspector Crown Timber Agencies.

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No. 25.

REPORT OF THE CROWN TIMBER AGENT AT CALGARY.

DOMINION LANDS AND CROWN TIMBER OFFICE,

CALGARY, ALBERTA, April 16, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to inclose herewith the following statements for the nine months ending March 31, 1907.

Schedule 'A,' statement of receipts on account of Crown timber, covering the period referred to, amounting to \$33,924.14.

Schedule 'B,' showing the saw-mills within the Crown Timber Agency in operation under government license to March 31, 1907.

Schedule 'C,' general office work.

You will observe that the quantity manufactured from licensed berths during the nine months amounted to 11,848,331 feet board measure; quantity sold, 10,630,657 feet board measure; manufactured by portable mills under permits, approximately, 1,500,000 feet board measure, which has practically all been disposed of. In addition to the 13,348,331 feet board measure manufactured as above mentioned, there has been 233,000,000 feet board measure purchased and brought into this district from British Columbia, but apparently nothing has been imported from the United States. The log crop according to an estimate made by Mr. Forest Ranger Margach has not been as large as the operators expected, owing to the scarcity of labour and weather conditions, but will amount to 20,000,000 feet board measure, made up as follows:—

Great West Lumber Co.	5,000,000
Union Bank of Canada.	5,000,000
Hon. Peter McLaren.	4,500,000
Eau Claire and Bow River Lumber Co.	3,500,000
Portable mills.	1,000,000
C. J. B. Anderson.	500,000
J. F. Pettepher.	500,000
Total.	20,000,000

Mr. Margach, Chief Forest Ranger, also states that during the summer of 1906 a great deal of damage was done by fire on the Red Deer river and its tributaries, originating from fires started by settlers with a view to clearing lands, and in his opinion settlement has reached about far enough west of the fifth meridian, and recommends that a close inspection should be made of timber values before granting homestead entries. In regard to this phase of the question the difficulty I find is that it is impossible to prevent the poorer class of settlers from squatting on lands near the timber, or upon lands containing a considerable amount of timber, as it is such an easy matter for them to erect houses for themselves and shelter for their stock in such localities.

Your obedient servant,

J. R. SUTHERLAND,

Crown Timber Agent.

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SCHEDULE B.

Name of Owner or Assignee.	Where Situated.	Kind of Power.	No. of Horse Power.	Commenced Operations.	Kind of Timber.	Logs Cut at	Lumber on Hand in Return of June 30, 1906, Manufactured and Sold since that Date and on Hand March 31, 1907.	Quantity of Shingles Manufactured and Sold.	Date of Return.	No. of Returns.	Berth No.
Eau Claire and Bow River Lumber Co.	Calgary ..	Steam	65	1887	Fir and spruce, cypress and pine.	Spray River ..	On hand June 30, 1906..	Feet. 2,963,140	Dec. 31, 1906..	2	E. & F. 318
							Manufactured	3,185,101			
							Sold	6,148,341 2,348,047			
J. H. Wray.....	Mountain View.	Steam	1904	1904			On hand Mar. 31, 1907..	3,800,194	Mar. 31, 1906..	..	583
							On hand June 30, 1906..	3,000			
							Manufactured	Nil.			
Great West Lumber Co	Little Red Deer River.	Steam	30, 1900	Aug 30, 1900	Fir and spruce Tp. 28 R's. 5 and 6 W 5th.		On hand Mar. 31, 1907..	3,000	Dec. 31, 1906..	2	252
							On hand June 30, 1906..	Nil.			
							Manufactured	2,064,570			
Union Bank of Canada	High River...	Steam	1903	1903	Fir and spruce	High River.....	Sold	2,064,570	Dec. 31, 1906..	2	579
							On hand Mar. 31, 1907..	Nil.			
							On hand June 30, 1906..	267,286			
							Manufactured	2,191,905			
							Sold.....	2,458,291			
							On hand Mar. 31, 1907..	1,373,644			
							On hand Mar. 31, 1907..	1,084,647			

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SCHEDULE B. *Continued.*

Name of Owner or Assignee.	Where Sited.	Kind of Power.	No. of Horse Power.	Commenced Operations.	Kind of Timber.	Logs Cut at	Lumber on Hand in Return of June 30, 1906; Manufactured and Sold since that Date and on Hand March 31, 1907.	Quantity of Shingles Manufactured and Sold.	Date of Return.	No. of Returns.	Berth No.
Thomas Quigley	N. E. 26 & 34 Steam 28-5-5.	30	1904	Spruce	Dog Pond	Freel. On hand June 30, 1906 .. 25,000 Manufactured	Nil. Sold	"	Dec. 31, 1906 ..	2	1159
Wm. Rutherford	10-8-31	Steam	1903	Spruce and pine.	10-8-34	On hand June 30, 1906 .. 54,000 Manufactured	110,000 Sold	"	Dec. 31, 1906 ..	2	1027
James & Otterbine	Didsbury	Steam	30	1905	Spruce and Little Red Deer pine.	On hand June 30, 1906 .. 297,961 Manufactured	64,000 Sold	"	Dec. 31, 1906 ..	2	1177
						On hand Mar. 31, 1907 .. 24,000	164,000 140,000				
						On hand Mar. 31, 1907 .. 24,000	271,961 257,834				
						On hand Mar. 31, 1907 .. 14,127					

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SCHEDULE C.

General office return of the Calgary Crown Timber Office for the nine months ending March 31, 1907.

Name.	Number.	Increase.	Decrease.	Remarks.
Letters received.....	28,861	.....	1,226	Including Dom. Lands.
Letters written.....	20,911	.....	9,738	" "
Permits issued subject to dues	50	.....	3	
Free permits issued	657	.....	233	
Mill returns received and verified. . .	23	.....	38	

No. 26.

REPORT OF THE CROWN TIMBER AGENT AT EDMONTON.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS OFFICE,
EDMONTON, ALBERTA, April 2, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to inclose herewith schedules 'A' and 'B,' relating to the work of the Timber and Mines Branch of this agency for the nine months ending March 31, 1907.

The total amount cut in board measure by berth owners was 11,043,366 feet, by the returns received to date, which, when all the returns are in, will likely be increased to 17,500,000 feet board measure according to an estimate made by Chief Forest Ranger Margach.

Owing to the great depth of snow the portable mill cut will not exceed 12,000,000 feet board measure.

The average price at which the lumber was sold at the mills would be \$17.50 per thousand feet board measure.

I have the honour to be, sir,

Your obedient servant,

A. G. HARRISON,

Crown Timber Agent.

SESSIONAL PAPER No. 25

SCHEDULE B.

RETURNS of Saw-mills operating in Edmonton Crown Timber Agency under Government License during the year ending March 31, 1907.

Name of Owner.	Where Situated.	Kind of Power.	No. of Horse Power.	Operations began.	Logs Cut on Limit No.	Lumber Manufactured in Period.	Lumber Sold in Period.	Date of Last Return.	Kind of Timber.	Lath Manufactured.	Lath Sold.
D. R. Fraser & Co.	Edmonton.	Steam	150	1899	788	B. M.	B. M.	Dec. 31, '06.	Spruce		
"	"	"	150	1905	812	Nil.	681,531	Mar. 31, '06.	"		
"	"	"	"	"	1,150	Nil.	Nil.	31, '07.	"		
J. M. Walker	Strathcona.	"	"	1900	864	884,518	884,518	Dec. 31, '06.	Spruce		
"	"	"	"	1906	1,140	523,427	231,251	" 31, '06.	"		
"	"	"	"	1906	1,163	1,619,833	1,619,833	" 31, '06.	"		
"	"	"	"	"	1,196	Nil.	Nil.	" 31, '06.	"		
"	"	"	"	"	1,333	"	"	" 31, '06.	"		
"	"	"	"	"	1,287	"	"	" 31, '06.	"		
"	"	"	"	"	1,288	"	"	" 31, '06.	"		
"	"	"	"	"	1,289	"	"	" 31, '06.	"		
D. R. Fraser & Co. & John Walker	Edmonton & Strathcona.	Steam	"	1900	1,141	Nil.	Nil.	Sept. 30, '06.	Spruce	105,000	105,000
"	"	"	"	"	9 Bkr 5 & 6	2,642,670	3,195,426	Dec. 31, '06.	"		
"	"	"	"	"	1,008	195,593	195,593	" 31, '06.	"		
"	"	"	"	"	"	Nil.	Nil.	Sept. 30, '06.	"		
"	"	"	"	"	1,091	Nil.	Nil.	Dec. 31, '06.	"		
"	"	"	"	"	"	"	"	" 31, '06.	"		
"	"	"	"	"	1,160	"	"	" 31, '06.	"		
"	"	"	"	"	302	"	"	Sept. 30, '06.	"		
"	"	"	"	"	1,161	"	"	Dec. 31, '06.	"		
"	"	"	"	"	"	"	"	Sept. 30, '06.	"		
"	"	"	"	"	1,211	"	"	Dec. 31, '06.	"		
"	"	"	"	"	"	"	"	Sept. 30, '06.	"		
D. R. Fraser & Co.	Stony Plain.	Steam	887	1900	887	870,000	650,000	Dec. 31, '06.	Spruce	25,000	25,000
North West Lumber Co.	Ponoka	"	100	1901	949	478,352	478,352	Sept. 30, '06.	"		
Hugh McPhee.	Spruce Grove.	"	"	1903	1,042	60,000	96,258	Mar. 31, '07.	"		
J. A. Powell.	Half Moon Lake	"	"	1903	849	"	"	" 31, '07.	"		
Edmonton Lumber Co.	Edmonton	"	"	"	955	Nil.	Nil.	Dec. 31, '06.	"		
"	"	"	"	"	962	"	"	" 31, '06.	"		
"	"	"	"	"	963	"	"	" 31, '06.	"		
"	"	"	"	"	968	"	"	" 31, '06.	"		

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SCHEDULE B—Continued.

RETURNS of Saw-mills operating in Edmonton Crown Timber Agency under Government License during the year ending March 31, 1907.—Continued.

Name of Owner.	Where situated.	Kind of Power.	No. of Horse Power.	Operations began.	Logs Cut on Limit No.	Lumber Manufactured in Period.	Lumber Sold in Period.	Date of last Return.	Kind of Timber.	Lath Manufactured.	Lath Sold.
Edmonton Lumber Co.	Edmonton				970	Nil.	Nil.	Dec. 31, '06.			
"	"				971	"	"	" 31, '06.			
"	"				972	"	"	" 31, '06.			
"	"				1,007	"	"	" 31, '06.			
"	"				1,009	"	"	" 31, '06.			
"	"				1,202	"	"	" 31, '06.			
"	"				1,204	262,614	225,614	" 31, '06.			
"	"				1,104	94,540	81,580	" 31, '06.	Spruce		
"	"				1,082	Nil.	Nil.	" 31, '06.	"		
"	"				1,088	"	"	" 31, '06.			
"	"				1,125	"	"	" 31, '06.			
"	"				1,156	"	"	" 31, '06.			
"	"				1,262	"	"	" 31, '06.			
"	"				1,020	"	"	" 31, '06.			
W. S. Drinnell.	Edmonton	Steam	1901	1901	356	2,295,929	2,295,929	Dec. 31, '06.	Spruce	441,000	441,000
J. F. Featherstonhaugh.	Port Saskatchewan.	"	100	1901	1,019	647,692	328,874	" 31, '06.	"	177,500	137,500
Blair & McKelvey.	Ponoka.	"	100	1903	1,022	Nil.	Nil.	" 31, '06.			
"	"	"		1905	1,190	311,000	311,000	" 31, '06.		72,500	72,500
"	"				1,273	"	"				
Imperial Pulp Co.	"				1,031	Nil.	Nil.	Dec. 18, '06.			
"	"				1,052	"	"				
"	"				1,058	"	"				
"	"				1,097	"	"	Dec. 18, '06.			
"	"				1,098	Nil.	Nil.	" 18, '06.			
McDonald & Frith.	Port Saskatchewan.				1,040	"	"	June 30, '06.			
T. A. Burrows.	"				1,046	"	"	" 30, '06.			
"	"				1,039	"	"	" 30, '06.			
"	"				1,033	"	"	" 30, '06.			
"	"				1,094	"	"	" 30, '06.			
"	"				1,068	"	"	" 30, '06.			
"	"				1,191	"	"	" 30, '06.			
"	"				1,192	"	"	" 30, '06.			

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SCHEDULE B—Concluded.

RETURNS of Saw-mills Operating in Edmonton Crown Timber Agency under Government License during the year ending March 31, 1907—Concluded.

Name of Owner	Where Situated.	Kind of Power.	No. of Horse Power.	Operations began.	Logs Cut on Limit No.	Lumber Manufactured in Period.	Lumber Sold in Period.	Date of last Return.	Kind of Timber.	Lath Manufactured.	Lath Sold.
Isaac Gagnon, part berth.	B.M.	B.M.	.....	.....	.....	.....
F. C. Papineau	B.M.	B.M.	.....	.....	.....	.....
Totals.....	11,443,366	11,824,812	.....	.....	821,000 *61,756	781,000 *61,756

BELOW ARE RETURNS MADE OF LUMBER MANUFACTURED IN 1906, BUT THE RETURNS WERE RECEIVED TOO LATE TO BE INCLUDED IN THE ANNUAL REPORT OF THAT YEAR.

D. R. Fraser & Co. & John Walter.....	Edmonton.....	910ks. 5&6	720,080	Mar. 31, '06.	.....	.....	.....	.....	.....	.....	.....
Deering Implement Co.	Stony Plain.....	887	350,000	April 19, '06.	.....	.....	.....	.....	.....	.....	.....
W. B. McPherson	Bentley	1,065	83,919	June 30, '06	.....	.....	.....	.....	.....	.....	.....

* Railway ties.

A. G. HARRISON,
Crown Timber Agent.

No. 27.

REPORT OF THE CROWN TIMBER AGENT AT PRINCE ALBERT.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

PRINCE ALBERT, SASKATCHEWAN, April 11, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to inclose herewith the following statements for the nine months ending March 31, 1907.

Schedule 'A,' statement of receipts on account of Crown timber, grazing, mining and hay.

Schedule 'B,' statement showing saw-mills operating under government license.

Schedule 'C,' statement showing general work during the nine months.

Your obedient servant,

R. S. COOK,

Crown Timber Agent.

SCHEDULE A.

STATEMENT of receipts, Crown Timber Office, Prince Albert, for nine months ending March 31, 1907.

Month.	Bonus.	Ground Rent.	Royalty.	Permit Dues.	Seizure Dues.	Timber, Grazing and Hay School Lands.	Grazing and Hay Dominion Lands.	Total.
	8 cts.	8 cts.	8 cts.	8 cts.	8 cts.	8 cts.	8 cts.	8 cts.
1906.								
July			4,472 04	36 68	240 25	55 20	40 40	4,844 57
August			61 32	372 10	92 50	5 50	50 50	581 92
September		42 98	2,048 34	6 50	117 19	6 50	3 20	2,224 71
October			4,516 40	1,105 92	7 45			5,629 77
November			884 97	366 25	1 40	2 75		1,255 37
December		6 19	4 37	1,168 00	20 00	55 60		1,254 16
1907.								
January		51	3,501 61	1,990 22	23 35	27 60		5,543 29
February			561 23	1,029 30	382 08	44 80		2,017 41
March		351 90	3 13	508 38	307 50	42 10		1,213 01
		401 58	16,053 41	6,583 35	1,191 72	240 05	94 10	24,564 21
Paid at Head Office....	25 00	416 37			6 00			447 67
								25,011 88

R. S. COOK,

Crown Timber Agent.

CROWN TIMBER OFFICE,

PRINCE ALBERT, April 5, 1907.

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SCHEDULE B.

STATEMENT showing Saw-mills in the Prince Albert district operating under Government License during the nine months ending March 31, 1907.

Name of Owner.	Horse-power and kind.	Capacity per 10 hours.	Commenced operations.	Description of timber.	Where cut.	Lumber.		Lath.		Date of last return.
						Manufact'd.	Sold.	Manufact'd.	Sold.	
The Prince Albert Lbr. Co., (Successor to Telford Lbr. Co.) Wm. Cowan & Co., Jas. H. Sanderson, " " (Permit berth) The Sturgeon Lake Lbr. Co., The Saskatchewan Lbr. Co.,	Steam.	160,000 1905	1905	Spruce	On Sturgeon and Little Red rivers.	14,914,432	11,589,268	2,749,606	2,171,200	Mar. 31, 1907.
	1,200 H. P.			"	On Little Red river.	3,180,522	3,396,849	319,750	270,330	" 1907.
	145 "	30,000 1890	1890	"	On Sturgeon river.	2,577,956	2,857,006	481,500	487,400	" 1907.
	225 "	30,000 1888	1888	"	(1299)	523,038	525,038			" 1907.
The Sturgeon Lake Lbr. Co., The Saskatchewan Lbr. Co.,	200 "	35,000 1899	1899	"	North of Sturgeon lake.	3,957,916	1,094,291	836,050	100,650	" 1907.
	250 "	35,000 1905	1905	"	Crooked river	3,652,302	3,563,632	728,800	583,480	" 1907.
						28,834,166	23,024,174	5,115,700	3,613,080	

R. S. COOK,
Crown Timber Agent.

CROWN TIMBER OFFICE,
PRINCE ALBERT, April 5, 1907.

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SCHEDULE C.

General return of the Crown Timber Office, Prince Albert, for the nine months ending March 31, 1907.

Timber permits issued.	1,073
Hay permits issued.	33
Timber seizures.	41
Mill returns received.	125

Revenue nine months 1906, \$13,851.90; 1907, \$24,564.21; increase, \$10,712.31.

No. 28.

REPORT OF THE CROWN TIMBER AGENT AT NEW WESTMINSTER.

DEPARTMENT OF THE INTERIOR,
DOMINION LANDS AND CROWN TIMBER OFFICE,
NEW WESTMINSTER, B.C., June 6, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit herewith my report for the nine months ending March 31, 1907. The receipts in this office for said period amounted to \$25,366.21, to which should be added amounts collected at head office during the period in question.

I also inclose herewith schedule of mills situated in the Dominion Railway Belt in the province of British Columbia, which gives the usual statistics respecting the timber trade.

I am pleased to be able to say that the lumber business in this province is in a flourishing condition. It would be impossible for me to make a comparison with last year's business, owing to the fact that this report only covers nine months.

I may say that we have been successful in preventing forest fires during the last season, there being a very small portion of merchantable timber destroyed. Having had a very dry spring, we have had considerable fires occur, but none of them have done any damage, owing to the efforts put forth by the fire rangers in subduing them.

Your obedient servant,

JAMES LEAMY,

Crown Timber Agent.

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SCHEDULE A.

STATEMENT of Receipts of New Westminster Crown Timber Agency, for the fiscal nine months ended March 31, 1907.

Month.	Bonus.	Rent.	Royalty.	Permit.	Seizures.	Fire Tax.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1906.							
July.....		115 76	3,350 71	81 95			3,548 42
August.....		376 87	1,454 19				2,031 06
September.....		30 00	2,761 86	250 25			3,042 11
October.....		242 23	2,640 00	650 80			3,533 03
November.....		10 86	4,770 20	239 72	50 50		5,071 28
December.....			1,351 85	190 86	55 00	4 14	1,601 85
1907.							
January....		10 87	5,256 82	236 00			5,503 69
February....		136 36	433 69	103 25			673 30
March.....		40 06	130 31	55 25	135 85		361 47
Paid at Otta- wa.		1,163 01	22,149 63	1,808 08	241 35	4 14	25,366 21
	155,641 45	4,165 28					159,806 73
Totals...	155,641 45	5,328 29	22,149 63	1,808 08	241 35	4 14	185,172 94

SESSIONAL PAPER No. 25

SCHEDULE B.
List of Mills operating in Dominion Railway Belt in British Columbia and Statement showing Quantity of Timber Manufactured during the nine months ended March 31, 1907.

Name of Owner.	Where Situated.	Capacity of Mill.	Power.	Operating on Limit No.	Locality of Limit.	Quantity of Lumber manufactured.	Quantity of lumber sold from quantity manufactured and quantity on hand from previous years.	Quantity of Lumber on hand.
Palliser Lumber Co.	Palliser	Ft. 40,000	Steam.	3 and 29	Beaver Foot and Kicking Horse	Ft. 2,749,117	Ft. 2,438,707	Ft. 441,016
Columbia River Lumber Co.	Golden	50,000	"	258, 422 and 257	Columbia River	4,566,080	3,254,956	2,438,454
"	Knaik	50,000	"	278, 45, 119, 305 and 72	Shuswap Lake	914,392	1,935,347	95,265
"	Carlin	40,000	"	239 and 129	"	1,063,290	2,036,314	111,888
"	Beaver	100,000	"	14, 343 and 15	Columbia River	723,585	1,794,382	346,781
Yale-Columbia Lumber Co.	Nakusp	30,000	"	88	"	3,538,355	5,144,280	2,129,080
Bowman Lumber Co.	Revelstoke	30,000	"	112, 113 and 279	"	6,479,105	6,418,409	69,690
Fred. Robinson Lumber Co.	Waguan	*30,000	"	118	"			
Harrison River Co.	Harrison River	100,000	"	185, 96, 33 and 268	Stave River and Stave Lake	476,584	476,584	Nil.
E. H. Heaps & Co.	Ruskin	125,000	"	35 and 138	Stave River	378,557	378,557	"
Bremet Saw Mill Co.	Supporton	75,000	"	B and 86	Cowdham and Mud Bay	674,126	674,126	"
B. C. Mills T. & T. Co.	Vancouver	150,000	"	B and 86	"	674,126	674,126	"
"	New Westminster	100,000	"	254	"	293,331	293,331	"
"	Ladner	25,000	"	52	Port Moody			
Hastings Single Mfg. Co	Hastings	125,000	"	433	North Arm Burrard Inlet	130,447	130,447	Nil.
G. G. Farrer	Vancouver	No mill.	"	246	"			
K. Mikuni	"	"	"	0	"			
Vancouver Power Co.	"	"	"	316 and 392	Columbia River	3,668,245	1,555,291	2,218,374
Big Bend Lumber Co.	Arrowhead	100,000	Steam.	233 and 335	"	4,527,584	6,163,252	4,303,492
Arrowhead Lumber Co.	"	125,000	"	69	Port Moody	3,387,500	3,387,500	Nil.
Geel Killam	Vancouver	No mill.	"	64	Greely Creek	2,101,545	2,101,545	"
W. H. Pratt	Revelstoke	"	"	210	Shuswap Lake	145,143	145,143	"
Lamb-Watson Lumber Co.	Kamloops	75,000	Steam.	344, 350, 351 and 406	Pitt Lake	732,375	732,375	"
Small & Bucklin	New Westminster	75,000	"	336, 363, 243	Eagle River	5,380,219	5,380,219	"
Three Valley	Mara	15,000	"	402	Mara	+	+	"
Rothessy Lumber Co.	New Westminster	30,000	"	281	Harrison Lake	+	+	"
Fraser River Lumber Co.	Blairie	30,000	"	290	Pitt Lake	+	+	"
Manitoba Lumber Co.	Blairie	30,000	"	106	Stave River	+	+	"
Fraser River Saw Mill Co.	Millside	125,000	"	364	Abbotsford	+	+	"
Abbotsford Lumber Co.	Abbotsford	50,000	"	236	Pitt Lake	106,788	106,788	"
Crafts & Lee	New Westminster	No mill.	"					
* Shingles.								
† Not operating on Dom. lands.								
						42,779,414	45,190,647	12,174,020

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SCHEDULE B.—Continued.
List of Mills operating in Dominion Railway Belt in British Columbia, &c.—Concluded.

Name of Owner.	Quantity of shingle bolts manufactured.	Quantity of shingle bolts sold out of quantity manufactured, and quantity on hand from previous year.	Cords.	Quantity of shingle bolts on hand.	Quantity of lath manufactured.	Quantity of lath sold.	Quantity of lath on hand.	Quantity of railway ties manufactured.	Pieces.	Quantity of railway ties sold.	Pieces.	Quantity of railway ties on hand.	No. of mill returns received.	Date of last return.
Palliser Lumber Co.	Nil.	Nil.	Nil.	Nil.	71,500	71,500	Nil.	154	154	21,098	21,098	Nil.	4	March 31, 1907
Columbia River Lumber Co.	"	"	"	"	Nil.	Nil.	"	9,179	9,179	9,179	9,179	"	4	" 31, 1907
"	"	"	"	"	"	"	"	9,610	9,610	9,610	9,610	"	4	" 31, 1907
"	"	"	"	"	"	"	298,300	Nil.	Nil.	Nil.	Nil.	"	4	" 31, 1907
Yale-Columbia Lumber Co.	"	"	"	"	"	"	Nil.	"	"	"	"	"	3	Dec. 31, 1906
Bowman Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
Fred. Robinson Lumber Co.	986	979	40	Nil.	"	"	"	"	"	"	"	"	4	March 31, 1907
Harrison River Mills T. & T. Co	Nil.	Nil.	Nil.	Nil.	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
E. H. Heaps & Co.	4,663	5,280	"	"	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
Brunette Saw Mill Co.	560	560	"	"	"	"	"	"	"	"	"	"	3	March 31, 1907
B.C. Mills T. & T. Co.	Nil.	Nil.	"	"	"	"	"	"	"	"	"	"	4	March 31, 1907
"	"	"	"	"	"	"	"	"	"	"	"	"	4	" 31, 1907
Grant & Kerr	"	"	"	"	"	"	"	"	"	"	"	"	4	" 31, 1907
Hastings Shingle Mfg. Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
G. G. Farcer	2,027	2,027	300	Nil.	"	"	"	4,547	4,547	Nil.	Nil.	"	3	Dec. 31, 1906
K. Mikuni	522	613	17 $\frac{3}{4}$	400	"	"	"	"	"	"	"	"	3	" 31, 1906
Vancouver Power Co.	Nil.	Nil.	"	Nil.	"	"	"	"	"	"	"	"	4	March 31, 1907
Big Bend Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
Arrowhead Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
Cecil Kilian	"	"	"	"	"	"	"	"	"	"	"	"	4	March 31, 1907
W. H. Pratt	"	15	18	"	"	"	"	"	"	"	"	"	4	" 31, 1907
Laurel-Watson Lumber Co.	"	Nil.	Nil.	Nil.	"	"	"	"	"	"	"	"	3	" 31, 1906
Small & Bucklin	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
Three Valley Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	1	June 30, 1906
Rothsay Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
Fraser River Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
Manitoba Lumber Co.	"	"	425	Nil.	"	"	"	"	"	"	"	"	4	March 31, 1907
Fraser River Saw Mill Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	Dec. 31, 1906
Abbotsford Lumber Co.	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
Grates & Lee	"	"	"	"	"	"	"	"	"	"	"	"	3	" 31, 1906
	8,698	9,454	1,200 $\frac{3}{4}$		71,500	404,000	298,300	44,588	44,588	Nil.	Nil.		105	

No. 29.

REPORT OF THE CROWN TIMBER AGENT AT WINNIPEG.

DEPARTMENT OF THE INTERIOR,

DOMINION LANDS AND CROWN TIMBER OFFICE,

WINNIPEG, MANITOBA, July 9, 1907.

The Commissioner of Dominion Lands,

Ottawa, Ont.

SIR,—I have the honour to submit my report upon the Timber, Mines and Grazing Branch of the department for the nine months ending March 31, 1907.

Appended thereto are statements showing the amount of revenue collected, classified according to returns forwarded during the period to head office, also giving a list of the saw-mills operating under license and permit and the amount of timber products manufactured, sold and on hand in connection with each, respectively.

The total amount of revenue collected on account of this branch amounts to \$92,859.37.

LUMBER SALES.

From carefully compiled returns made up from particulars obtained from our office records and from wholesale and retail dealers and the Department of Customs at Ottawa, the sales of lumber in the Winnipeg timber district during the period covered by this report amount to 259,085,911 feet B.M., made up as follows:—

From province of Ontario west of Lake Superior—

From Canadian logs.	57,000,000
From American logs.	51,000,000
From province of British Columbia.	90,000,000
Imported from United States.	11,642,941
From mills operating under Dominion license.	37,442,970
From mills operating under Dominion permit.	12,000,000

Total. 259,085,911

Owing to the active demand for lumber material and shortage in supply, prices were increased and to-day stand higher than at any time during the past twenty-five years. For purposes of comparison I give hereunder the selling price of the different classes of lumber during the year ended June 30, 1906, with that for the nine months ending March 31, 1907.

	1906.	1907.
Pine, Cedar and Fir—		
Dimension lumber.	\$20 00 to \$26 00	\$23 00 to \$30 00
Fir for interior finishing.	30 00 " 40 00	40 00 " 50 00
Flooring, siding and ceiling.	25 00 " 33 00	35 00 " 45 00
Ship lap and common boards.	18 00 " 23 00	23 00 " 26 00
Spruce—		
Dimension lumber.	18 00 " 20 00	22 00 " 28 00
Siding, flooring and ceiling.	20 00 " 22 00	23 00 " 28 00
Ship lap and common boards.	17 00 " 20 00	20 00 " 26 00
Lath.	3 25 " 4 25	4 00 " 5 00
Shingles.	2 00 " 2 85	3 35 " 3 75

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FUEL.

The figures given hereunder give approximately the sales of coal and wood during same period.

	1905-6.	1906-7.
	Tons.	Tons.
American anthracite.....	58,000	115,000
American bituminous.....	60,000	105,000
Canadian anthracite.....	8,000	40,000
Canadian bituminous.....	93,000	62,200
Canadian lignite.....	96,126	68,796
Total	315,126	390,996

These figures are exclusive of coal used in connection with the operations of the railroads.

The following retail prices were obtained at Winnipeg:—

	1905-6.	1906-7.
American anthracite	\$10 50	\$10 50 to \$11 00
American bituminous.....	7 00 to 8 8 50	8 00 " 9 00
Canadian anthracite.....	10 00	10 00
Canadian bituminous.....	7 00 " 8 50	8 00 " 9 00
Canadian lignite.....	4 50 " 5 00	5 00

CORDWOOD.

The sales of cordwood in the city of Winnipeg and town of St. Boniface during the nine months amount to 95,000 cords. The retail price charged per cord was for poplar \$4.50 to \$6.50, spruce and jackpine, from \$6 to \$8, and tamarac from \$7 to \$10.

This wood, excepting 11,462 cords imported from the United States, was principally taken from Dominion and provincial lands under permits.

FOREST FIRES.

The damage to timber resulting from fires in this district was very small.

HAY.

The hay crop of 1906 was excellent. The demand for permits from settlers to cut upon Dominion and school lands was large, amounting to several thousands of tons.

Your obedient servant,

E. F. STEPHENSON,

Crown Timber Agent.

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SCHE

SHOWING Quantity of Lumber, &c., Manufactured (and sold) at Saw-Mills Operating
months ending

Name.	Location of Mill.	Location of Limit.	Lumber manufactured.	Lumber sold.	Lumber on hand.
			Ft.	Ft.	Ft.
Ashdown & Bossons..	Swan River.....	Swan River.....	271,721	383,212	146,329
Theo. A. Burrows....	Grandview.....	Duck Mountain....	8,172,574	7,525,186	2,568,471
The Bank of Ottawa..	Durban & Mafeking.	Mafeking.....	778,004	2,414,709	474,856
Halli Bjornson.....	Icelandic River....	Icelandic River....		115,000	
The Bank of Toronto..	Winnipeg.....	Rosseau River.....	1,577,105	2,021,260	2,637,043
Jefferson Caverly....	Woody River.....	Tp. 38, R. 29, W. 1..	1,620,600	93,000	2,330,600
A. W. Fraser.....	Red Deer Lake....	Etoimami.....	3,046,279	150,300	2,895,979
John Hanbury.....	Brandon.....	Duck Mountain....	2,826,369	3,537,734	1,967,710
W. D. Jefferson.....	Tp. 20—R. 1 E 1....	Lakes W'peg & Man.	283,921	394,452	89,000
B. J. Mathews.....	The Narrows.....	Lake Manitoba....	195,312	70,000	125,312
Mutchenbacher Bros..	Mafeking.....	Tp 35, R. 25 & 26 W 1	1,862,848		1,862,848
J. D. McArthur.....	Lac du Bonnet....	Winnipeg River....	1,684,863	2,240,175	312,502
Peter McArthur.....	Winnipegosis.....	Lake Winnipegosis..	1,523,707	1,801,682	1,072,025
Mackenzie, Mann & Co.	Mistratin.....	Etoimami.....	1,226,670	588,492	1,713,071
J. H. McClure.....	Balmoral.....	Tp. 19, R. 2, E. 1..	155,000	210,000	210,340
William Peden.....	Rosburn.....	Riding Mountain...	194,436	213,927	20,000
C. G. Pennock.....		Lake of the Woods..			
William Robinson....	Selkirk.....	Lake Winnipeg....	169,126	866,237	
Ritchie Bros.....	Ochre River.....	Ochre River.....		41,046	29,450
Josias Rutley.....	".....	".....	174,698	175,764	
Red Deer Lumber Co.	Red Deer Lake....	Eastern Sask.....	13,724,454	6,730,545	12,747,932
O. A. Robertson.....	".....	".....	2,815,666	2,815,666	
Shaw Bros.....	Dauphin.....	Riding Mountain...	2,982,651	3,373,875	1,653,374
John Sinnott.....	Grandview.....	Duck Mountain....	447,257	354,635	393,854
Swan River Lum. Co.	Minitonas.....	Tp. 36, R. 24, W. 1..		19,953	260,541
James Stuart.....	Bad Throat River..	Lake Winnipeg....		383,773	
J. T. Thomas.....	10—18—3 E. 1.....	".....	20,000	131,145	
A. L. Wills.....	Grindstone Point...	".....	681,754	731,202	
W. J. F. Williams....	Lake Dauphin.....	Tp 28 & 29 R 17 W 1	110,000	60,000	120,000
			46,545,015	37,442,970	33,622,228

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DULE B.

under Government License in the Winnipeg Crown Timber Agency, for the nine March 31, 1907.

Shingles manufactured.	Shingles sold.	Shingles on hand.	Lath manu- factured.	Lath sold.	Lath on hand.	Remarks.
Cds.	Cds.	Cds.	M.	M.	M.	
.....	637,000	922,850	85,550	{ Operated by Durban Lum. Co & Mutchenbacker Bros.
.....	Operated by D. E. Sprague.
.....	63,400	63,400	.....
.....	
.....	
.....	
.....	
.....	
.....	Cut railway ties only.
.....	6,461,000	2,681,600	6,686,400	
.....	246,000	246,000	.....	Operated by Red Deer Lum. Co.
.....	857,700	504,650	405,700	
.....	52,000	72,650	
.....	
.....	
60,000	60,000	90,000	
60,000	60,000	90,000	8,265,100	4,470,500	7,250,300	

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No. 30.

REPORT OF THE COMMISSIONER OF CANADIAN IRRIGATION SURVEYS.

IRRIGATION OFFICE,

CALGARY, ALTA., April 4, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—In the spring of 1906 I sent three engineering parties into the field, one in charge of J. F. Hamilton, C.E., to gauge all large rivers and streams and establish gauge rods. During the season Mr. Hamilton gauged some fifty-six streams all told, and established twelve gauge rods in the large streams as follows:—

Bow river above the Canadian Pacific Railway headgates. Fish creek at the L. E. Railway crossing. Sheep river at the railway crossing. Highwood river at traffic bridge. Willow creek at the railway crossing. Old Man river below the railway crossing. Pincher creek at Pincher. Waterton river, section twenty, township five, range twenty-seven, west fourth meridian. Belly river, section thirteen, township three, range twenty-eight, west of the fourth meridian. Waterton river at lakes, section eight, township two, range twenty-nine, west of the fourth meridian. St. Mary's river above Alberta Railway and Irrigation Company's headgates. On all the above gaugings a careful cross-section was made.

The second party was in charge of Mr. P. M. Sauder, with instructions to inspect and report on all the various irrigation schemes which had been authorized and not completed in Southern Alberta, also to gauge all the small streams and make any surveys required by parties purchasing lands under the Irrigation Act. Under those instructions Mr. Sauder made eighty-five inspections and reported on the same to this office and five surveys of land in connection with applications to purchase under the Irrigation Act, and gauged thirty-four streams.

The third party was in charge of Mr. R. J. Burley, with instructions to inspect and report on all the irrigation schemes authorized and not completed in Saskatchewan, also to gauge all small streams and make any surveys that would be required of lands sold under the Irrigation Act. Under those instructions Mr. Burley inspected one hundred and twenty-one irrigation schemes and reported to this office. He also made twenty-three surveys of lands in connection with applications to purchase under the Irrigation Act, and took gaugings of seventeen small streams until the current metre he had went out of order.

During the summer of 1906 I inspected the homestead and irrigation scheme of A. B. & E. Ward at Kamloops, B.C., also a dry lake for W. W. Nichols on section twenty-three, township twenty-six, range two, west of the second meridian, near Yorkton, and in December I inspected a portion of the irrigation scheme of F. P. Aylwin as far as Arrowwood creek, but owing to depth of snow I had to abandon the survey, which I had completed in February last, by Mr. J. F. Hamilton, C.E.

During the past season I inspected the works of the Alberta Railway and Irrigation Company, twice, with reference to their expenditure on enlargement and extensions of their works.

With reference to the inside work of this office since July 1, 1906, there have been 984 communications received and 2,163 sent out, as well as 43 applications for water rights (in duplicate), 263 agreements for the supply and use of water (in quadruplicate), and some 136 gauge rod readings. There have also been some 20 right of way plans examined and compared and recorded.

SESSIONAL PAPER No. 25

For the coming season it is intended to carry out practically the same programme of work in the field as last year and have three parties employed on the same class of work and covering the same territory.

Your obedient servant,

JOHN STEWART,

Commissioner and Chief Engineer of Irrigation.

No. 31.

REPORT OF THE INSPECTOR OF RANCHES.

OFFICE OF THE INSPECTOR OF RANCHES,

CALGARY, ALTA., April 9, 1907.

The Commissioner of Dominion Lands,
Ottawa, Ont.

SIR,—I have the honour to submit my report of the transactions of this office for the fiscal nine months ending March 31, 1907.

During this period 2,105 inspections have been made of grazing leases, stock-watering reserves and applications to purchase, and in the discharge of these duties 6,507 miles have been driven by team and 11,536 miles have been travelled by rail.

The past winter has been unusually severe, and at times it was almost impossible to make progress with the work of inspections. It has been a period of trial, and in some cases the stockmen have suffered severe losses in certain parts, while in other parts the losses have not been above the average.

Owing to the rapid settlement of the country and to the illness of the late W. W. Stuart, Inspector of Ranches, the volume of work in this office had accumulated, but with the valuable assistance of Homestead Inspector J. A. Bannerman since August last, the work is being well brought up to date.

Your obedient servant,

ALBERT HELMER,

Inspector of Ranches.

No. 32.

REPORT OF THE ORDNANCE AND ADMIRALTY LANDS BRANCH.

DEPARTMENT OF THE INTERIOR,

OTTAWA, July 13, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—In compliance with departmental instructions, I have the honour to submit the following report on the work in connection with this branch of the department for the fiscal nine months ending March 31, 1907.

During the period covered by this report there were no sales of ordnance lands held, but with regard to lands previously sold, or held under lease with the right to

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purchase, sixteen whole lots and seven half lots, situated in the several localities mentioned hereunder and in the accompanying statement marked 'A,' have been paid up in full and letters-patent issued therefor:—

1. Edmundston, N.B.—One lot, forming part of the ordnance reserve in this locality, and which was disposed of at a sale of lots held in 1905, for the sum of \$180, was paid up in full and letters-patent issued. The sum of \$90, being the balance of the purchase money, was received within the fiscal nine months.

2. Grand Falls, N.B.—Four lots, forming a portion of the reserve at this point, and which were disposed of at an auction sale of lots held at the town of Grand Falls in 1902 for the sum of \$63.40, have been paid in full and letters-patent issued, the sum of \$27.86, the final payment of the purchase money, having been received during the period covered by this report.

During the autumn of 1906 a small portion of this reserve was surveyed and subdivided into twenty-one town lots, with the view of offering them for sale by public auction at an early date.

3. Nepean.—Two pieces of property, forming part of lot 'L,' concession 'B,' of this township, and which were sold at auction in 1900 for the sum of \$2,178, have been redeemed. The last instalments of purchase money, totalling the sum of \$1,458.90, were received within this fiscal period, and letters-patent have been issued.

The land in this locality is not strictly speaking ordnance land, but is land which was appropriated for the purposes of the Rideau canal, and it being found that the same was not required for the use of the said canal, the property was placed under the control of this department to be sold or leased.

4. Ottawa.—The lots in this locality are held by tenants under the provisions contained in the original lease granted by the Imperial authorities, one of such provisions being that the lessees may at any time, upon payment in cash of the amount of consideration money placed upon these lots, redeem and obtain the Crown patent therefor. During the nine months ending March 31, last, five whole and seven half lots have been redeemed and letters-patent issued. The total amount of consideration money received for these lots was \$1,388.24.

5. Point Pelee.—The naval reserve at this point was handed over to Canada upon the understanding that it was not to be disposed of without the consent of the Lords Commissioners of the Admiralty; but the squatters who, at the time of the transfer, occupied portions of this reserve, were permitted to acquire title from the government of Canada for such portions as they actually occupied as holdings, upon payment at the rate of \$1 per acre plus their proportionate cost of survey. One of these squatters, who occupied a small piece of land (.48 of an acre), and who had not taken advantage of the privilege, recently made application to secure title for his holding, and upon payment of the sum fixed, together with interest thereon since 1891, letters-patent were issued in his favour.

6. Quebec.—Two lots, forming part of the ordnance property in this locality known as the 'Cove Field,' and which were sold in 1900 for the sum of \$1,200, have been fully paid for and letters-patent issued. The balance of the purchase price amounting to \$240, was received within the fiscal nine months.

7. Sorel.—Under the authority of an order in council dated September 11, 1906, and in accordance with the provisions of the Act 23 Victoria, chapter 2, section 14, an additional free grant of 4.30 acres of land was made to the Fabrique de St. Joseph de Sorel for the purpose of enlarging the cemetery. The land so granted formed part of block 'A' of the ordnance reserve known as 'The Pointe,' opposite the town of Sorel. This additional grant, together with a similar one made in 1883, makes up a total area of 10 acres, the quantity of land which the above cited Act empowers the Governor General in Council to set apart for public purposes.

The following statements are appended:—

A.—Statement showing number of lots redeemed, the amount for which such lots were previously sold, and the balance of purchase money received during the fiscal nine months ending March 31, 1907.

SESSIONAL PAPER No. 25

B.—Statement showing the several localities where ordnance lands are situated on account of which moneys have been received during the fiscal nine months ending March 31, 1907, the net revenue derived from these lands during the period mentioned being \$6,662.90.

C.—Statement showing the amount received each month of fiscal period covered by this report, classified as fees, rent or interest equal to rent, and principal.

D.—Statement showing the amount due and unpaid on account of instalments of purchase money and rent or interest, the total amount shown to be due and unpaid being \$61,020.06.

In the month of September, 1891, the War Office authorities sent out to Canada a large number of maps, plans, and records relating to the ordnance and military properties in Canada. Some of these plans and records were handed over to the Department of Militia and Defence; by far the greater number, however, remained in the custody of this department. But owing to insufficient accommodation in this department for the proper protection and classification of these valuable historic records it was decided to transfer most of them to the Dominion Archives, which was accordingly done. Those retained among the records of this department relate to properties the control and management of which are still vested in this branch.

The correspondence and other routine work in connection with this branch of the department has noticeably increased during the fiscal nine months covered by this report. During that period 247 letters have been received and registered, 250 letters written and copied and 38 reports prepared dealing with various properties; 175 accounts have been prepared and mailed to the respective purchasers and tenants of ordnance lands. The office cash book has been carefully kept; the monthly statement book entered up and a return made to the accountant of the department each month; likewise the accounts open in the ledgers of this branch have been regularly and carefully posted.

During the same period 23 draft letters-patent have been prepared, being an increase of 3 over the preceding twelve months, and 14 assignments examined and registered in the books of this branch, an increase of 1 over the previous fiscal year.

In addition to the foregoing report upon the work in connection with the Ordnance Lands Branch, I beg to submit the following report on the work carried on in connection with the orders in council passed from time to time relative to the administration of this department in all its branches. The importance and necessity of having a complete record of all the orders in council relating to and affecting in any way the rules and regulations governing this department must be very apparent. Instructions were accordingly issued requiring that a complete set of the orders in council passed each year should be recorded, copied, printed, indexed and bound for convenience of departmental reference and for the purpose of forming what might be considered one of the most valuable of the departmental records.

When the duties pertaining to this work were intrusted to me, I found that the bound volumes of orders were considerably in arrears. These I have been endeavouring to bring up to date, with the result that volumes for two years, namely 1901 and 1902 have been completed within the fiscal nine months. This makes a total of six volumes of these orders in council which have been got out since I took charge of this work.

All the orders in council relating to this department are recorded in this office, copies of same made and carefully compared, and a supply of printed copies obtained and filed for the use of the various branches of the department to which these orders respectively relate.

Copies are also made and requisitions issued on the King's Printer for the publication in the *Canada Gazette* and also in the *British Columbia Gazette* (in the latter only when such orders relate to the administration of the regulations governing lands in the Railway Belt). Returns of these gazetted orders in council are made to both

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houses of parliament within the first fifteen days after the opening of each session of parliament.

I have the honour to be, sir,

Your obedient servant,

JOS. P. DUNNE,

Clerk in charge of Ordnance and Admiralty Lands Branch.

A.—STATEMENT showing number of Lots redeemed, the amount for which such lots were previously sold and the balance of purchase money received during the fiscal nine months ending March 31, 1907.

Locality.	Number of Lots Redeemed.	Amount of Purchase or Consideration Money.	Amount received on account during the Fiscal Nine Months.	Remarks.
		§ cts.	§ cts.	
Edmundston	1 lot	180 00	90 00	Balance of purchase money.
Grand Falls	4 lots	63 40	28 50	" "
Nepean	2 "	2,178 00	1,583 80	" "
Ottawa	5 " and 7 ½ lots	1,388 24	1,388 24	Consideration money.
Point Pelee	1 lot	48	48	Purchase price.
Quebec	2 lots	1,200 00	240 00	Balance of purchase money.
Sorel	4·30 acres	Nil.	Nil.	Free grant.
Total		5,010 12	3,331 02	

JOS. P. DUNNE,

Clerk in charge of Ordnance and Admiralty Lands Branch.

SESSIONAL PAPER No. 25

B.—STATEMENT showing the several localities on account of which moneys have been received during the fiscal nine months ending March 31, 1907.

Locality.	Amount.
	\$ cts.
Amherstburg.....	4 00
Burlington Beach.....	100 00
Chambly.....	508 38
Charlotteville.....	18 31
Edmundston.....	137 75
Elmsley.....	10 80
Fort Cumberland.....	40 00
Fort Erie.....	24 00
Grand Falls.....	297 08
Grenville.....	4 40
Kingston.....	224 00
Longueuil.....	234 00
Montreal.....	1 00
Nepean.....	1,583 80
Niagara.....	10 00
Oromocto.....	50
Ottawa.....	2,116 87
Owen Sound.....	98 00
Point Pelee.....	5 56
Prescott.....	2 00
Quebec.....	990 75
Sarnia.....	40 00
Shelbourne.....	60 00
Simcoe.....	4 00
Sorel.....	4 00
Wolford.....	105 80
Registration Fees.....	48 90
LESS—Refund.....	6,663 90
Total.....	1 00
	6,662 90

JOS. P. DUNNE,

Clerk in charge of Ordnance and Admiralty Lands Branch.

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C.—STATEMENT of receipts on account of Ordnance and Admiralty Lands for each of the fiscal nine months ending March 31, 1907.

Month.	Fees.	Rent or Interest.	Principal.	Total.
1906.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.....	8 00	62 93	105 00	175 93
August.....	4 00	143 51	434 00	581 51
September.....		251 23	314 42	565 65
October.....	4 00	286 36	393 10	683 46
November.....	12 00	322 55	1,633 48	1,968 03
December.....	6 00	149 40	83	156 23
1907.				
January.....	90	304 04	943 79	1,248 73
February.....	4 00	74 55	110 00	188 55
March.....	10 00	439 51	646 30	1,095 81
	48 90	2,034 08	4,580 92	6,663 90
Less refund in the month of February.....				1 60
				6,662 90

JOS P. DUNNE.

Clerk in charge of Ordnance and Admiralty Lands Branch.

D.—STATEMENT showing amounts due and unpaid on account of instalments of purchase money and rent or interest for the fiscal nine months ending March 31, 1907.

Locality.	Amount of instalments due and unpaid.	Rent or interest due and unpaid.	Total.
	\$ cts.	\$ cts.	\$ cts.
Beaver Harbour.....		4 00	4 00
Burlington Beach		180 00	180 00
Carillon.....		4 80	4 80
Chambly.....	182 00	302 75	484 75
Dalhousie.....	23 00	8 28	31 28
Edmundston.....	96 93	97 52	194 45
Elmsley.....		50	50
Grand Falls.....	1,770 01	454 09	2,224 10
Kingston.....	50 96	52 27	103 23
Longueuil.....		240 00	240 00
Marlborough.....		60 00	60 00
Nepean.....	216 00	140 08	356 08
Ottawa.....		2,907 06	2,907 06
Owen Sound.....		29 00	29 00
Oxford.....		21 20	21 20
Pomeroy Bridge.....		6 25	6 25
Presqu'isle.....		1 00	1 00
Quebec.....		30 00	30 00
Shelburne Harbour.....		1 00	1 00
Sorel.....		1,296 36	1,296 36
St. Croix River.....		2 00	2 00
Toronto.....	52,000 00	780 00	52,780 00
Wolford.....		63 00	63 00
	54,338 90	6,681 16	61,020 06

JOS. P. DUNNE,

Clerk in charge of Ordnance and Admiralty Lands Branch.

Chief Clerk.

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B.—ABSTRACT OF LETTERS PATENT covering Dominion Lands situate in Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon Territory issued from the Department of the Interior during the Fiscal Year (nine months) ending March 31, 1907, as compared with the corresponding nine months of the Fiscal Year ending June 30, 1906.

Number.	Nature of Grant.	FROM JULY 1, 1906, TO MARCH 31, 1907.		FROM JULY 1, 1905, TO MARCH 31, 1906.	
		Patents.	Acres.	Patents.	Acres.
1	British Columbia homesteads.....	25	3,829	37	5,479
2	" " sales.....	32	2,919	34	5,071
3	Coal lands sales.....	2	632	3	730
4	Commutation grants.....	2	251	10	341
5	Homesteads.....	8,894	1,417,541	5,523	876,672
6	Hudson's Bay Co.....	25	20,111	11	24,105
7	Manitoba Act grants.....			6	122
8	Military Bounty grants.....	1	160	1	160
9	" homesteads.....	3	959	4	1,277
10	Mineral rights (179 acres).....	4		3	362
11	Mining lands sales.....	2	400	9	918
12	North-west half-breed grants.....	333	67,381	249	45,710
13	Parish sales.....	8	770	11	1,168
14	Quit claim special grants (485 acres).....	9		11	
Railways:—					
15	Alberta Railway and Coal Co.....	1	160		
16	Calgary and Edmonton Railway Co.....			8	2,215
17	" " " (Under rights, 194 acres.).....	2		588	
18	Canadian Northern Railway Co.....	332	284,662	57	12,605
19	Canadian Pacific Railway grants.....	140	237,861	421	1,079,099
20	" " " Souris Branch.....	66	195,692	40	124,399
21	" " " " " (Under rights).....			155	
22	Canadian Pacific Railway roadbed and station grounds.....	6	117	12	895
23	Manitoba and Northwestern Railway Co.....	18	271	2	20,176
24	Manitoba Southwestern Colonization Rail- way Co.....	99	37,592	212	139,132
25	Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.....	41	22,910	375	528,292
26	Sales.....	361	50,161	225	33,000
27	School lands sales.....	105	15,382	63	10,097
28	Special grants.....	65	726	55	1,535
29	Yukon Territory sales.....	20	843	44	1,808
30	" " specials.....			2	160
	Totals.....	10,596	2,361,330	8,171	2,915,518

N. O. COTÉ,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

SESSIONAL PAPER No. 25

C.—STATEMENT showing the number of acres of swamp lands in Manitoba transferred by order in council to the province of Manitoba, up to March 31, 1907.

	Acres.
April 16, 1888..	52,600·00
June 7, 1888..	60,335·60
August 25, 1891..	105,635·41
December 7, 1891..	36,479·00
April 22, 1893..	69,680·00
October 21, 1893..	13,040·00
October 4, 1895..	50,602·72
October 31, 1896..	53,520·19
October 31, 1896..	6,960·00
November 10, 1896..	137,016·75
December 1, 1896..	117,250·09
June 18, 1897..	151,985·39
June 27, 1898..	3,120·00
December 1, 1899..	148,811·39
February 17, 1899..	48,470·00
August 18, 1899..	
May 26, 1900..	
January 6, 1900..	160·00
April 26, 1902..	20,744·01
February 3, 1903..	27,764·85
February 3, 1903..	84,659·48
August 17, 1904..	5,127·00
August 17, 1904..	5,584·00
August 18, 1904..	13,098·01
September 28, 1904..	43,192·27
December 29, 1904..	10,719·73
April 20, 1905..	160·00
July 20, 1905..	16,285·00
January 8, 1907..	13,137·00
January 14, 1907..	31,536·50
January 14, 1907..	85,569·82
Total..	1,413,244·21

N. O. COTE,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

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D.—STATEMENT showing number of patents forwarded to the several registrars of the Land Registration districts of the provinces of Alberta, Saskatchewan and Yukon Territory, and the number of notifications mailed to patentees during the nine months, July, 1906, to March, 1907, inclusive.

Registration District.	Number of Patents sent to Registrars.	Number of notifications mailed to Patentees.
Assiniboia.....	3,462	3,428
East Saskatchewan.....	977	918
West Saskatchewan.....	522	431
North Alberta.....	1,950	638
South Alberta.....	1,405	1,258
Yukon.....	12	8
Totals.....	8,328	6,681

N. O. COTE,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

E.—STATEMENT showing the number of entries cancelled from July 1, 1906, to March 31, 1907.

Year.	Homesteads.	Pre-emptions.	Time Sales.	Sales.
1873.....	1			
1874.....	1			
1879.....	2			
1881.....		2		
1883.....	7	4		
1884.....	4	1		
1885.....	6			
1886.....	4			
1887.....	3	1		
1888.....	1			
1889.....	5			
1890.....				1
1891.....	5		1	1
1892.....	5			1
1893.....	4			
1894.....	2			
1895.....	4		1	
1896.....	3			
1897.....	1			
1898.....	9			
1899.....	6			
1900.....	25			
1901.....	91			
1902.....	432			
1903.....	1,153		1	1
1904.....	1,834			
1905.....	5,589			
1906.....	4,899		1	
1907.....	14			
	14,110	8	4	4

N. O. COTE,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

SESSIONAL PAPER No. 25

F.—STATEMENT showing the number of assignments recorded at head office during the nine months ending March 31, 1907.

Number of deeds registered..	923
Fees received in connection therewith..	\$1,999.50

N. O. COTE,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

G.—STATEMENT of entries affecting Dominion Lands which were made at head office for the nine months ending March 31, 1907.

Name of Grant.	No. of Grant	Acres.
Special Grants	64	2,871 25
Calgary and Edmonton Railway Co.....	1	161 00
Canadian Northern Railway Co.....	293	314,812 73
Canadian Pacific Railway Co., Main Line.....	140	237,781 17
Canadian Pacific Railway Co., Souris Branch	66	195,692 10
Manitoba Southwestern Colonization Railway Co.....	94	36,472 08
Railway Right of Way.....	76	1,367 22
Hudson's Bay Company.	33	289,991 45
	767	1,079,149 00

N. O. COTE,
Chief Clerk.

DEPARTMENT OF THE INTERIOR,
LAND PATENTS BRANCH, August 2, 1907.

No. 34.

REPORT OF THE CORRESPONDENCE MAILING OFFICE.

DEPARTMENT OF THE INTERIOR,
CORRESPONDENCE COMPARING AND MAILING OFFICE,
OTTAWA, July 9, 1907.

W. W. CORY, Esq.,
Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit to you herewith a statement showing in part the work done in the Comparing and Mailing Office of the Department of the Interior during the nine months of the fiscal year ending March 31, 1907.

The outgoing correspondence has increased during this period 32 per cent, the largest yearly increase since the establishment of the department.

I have the honour to be, sir,

Your obedient servant,

CHAS. C. PELLETIER.,

Clerk in Charge.

7-8 EDWARD VII., A. 1908

STATEMENT of the work done in the comparing and mailing room during the nine months of the fiscal year ending March 31, 1907.

From July 1, 1906, to March 31, 1907.	Letters sent.	Registered letters sent.	Telegrams sent.	Totals.
1906.				
July.....	21,697	2,626	109	24,432
August.....	20,384	2,147	167	22,698
September.....	20,136	2,020	145	22,301
October.....	23,917	3,159	152	27,228
November.....	25,338	3,728	87	29,153
December.....	21,679	2,431	65	24,175
Totals for first half year.....	133,151	16,111	725	149,987
1907.				
January.....	25,545	3,831	92	29,468
February.....	22,088	3,631	182	25,901
March.....	25,182	2,968	89	28,239
Total from January 1, 1907, up to and including March 31.....	72,815	10,430	363	83,608
Total for first half year.....	133,151	16,111	725	149,987
Total for 9 months of the fiscal year ending March 31, 1907.....	205,966	26,541	1,088	233,595

The number of pages of documents, &c., compared during the nine months of the fiscal period ending March 31, 1907, was 1,342.

The number of pages of letter book indexed was 99,175; each page was indexed in double entry. The indexing shows an increase over the same period of last year of 21 per cent.

The daily average of letters sent out was 950, or an increase over the same period last year of 31 per cent.

The grand total for this office during the nine months of the fiscal year, 1907, is 233,595, or an increase of 32 per cent over the corresponding period last year.

CHAS. C. PELLETIER,

Clerk in Charge.



PART II

IMMIGRATION

IMMIGRATION.

REPORT OF THE SUPERINTENDENT OF IMMIGRATION.

DEPARTMENT OF THE INTERIOR,

OTTAWA, April 2, 1907.

W. W. CORY, Esq.,

Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to place before you herewith the annual reports of the principal officers engaged in the immigration service, together with a report from the High Commissioner for Canada in London, and appended reports from British and continental agents, &c. These reports cover the fiscal period of nine months ending March 31, 1907.

The following statistical tables, for the same period, have been compiled in my office:—

IMMIGRANT ARRIVALS.

SUMMARY for the Fractional Fiscal Year 1906-7 (nine months, ending March 31, 1907).

Per ocean-travel—

North Sydney..	1,012	
Halifax..	18,192	
St. John..	11,641	
Quebec..	41,537	
Vancouver..	2,282	
Victoria..	2,293	
New York..	9,794	
Portland..	2,438	
Boston..	571	
Baltimore..	154	
Philadelphia..	94	
	<hr/>	13,051
		<hr/>
From the United States, not including 89 United States citizens by ocean ports..		90,008
		<hr/>
Total..		124,667

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COMPARATIVE STATEMENT.

TOTAL IMMIGRANTS arriving for Canada, by months, for the Fractional Fiscal Year 1906-7 (nine months, ending March 31, 1907), and for the corresponding months of the Fiscal Year 1905-6.

	NINE MONTHS, JULY TO MARCH, INCLUSIVE, OF FISCAL YEAR 1905-6.				FRACTIONAL FISCAL YEAR 1906-7 (9 MONTHS, ENDING MARCH 31, 1907).			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
July.....	6,478	2,991	3,109	12,578	9,859	4,420	4,087	18,357
August.....	5,446	2,456	2,535	10,437	9,641	3,792	3,590	17,023
September.....	5,413	2,986	2,649	11,048	7,345	3,817	3,173	14,335
October.....	4,878	2,457	2,322	9,657	6,993	3,558	3,251	13,802
November.....	3,905	1,876	1,689	7,467	6,395	2,689	2,370	11,454
December.....	2,964	1,204	1,138	5,306	4,109	1,851	1,688	7,648
January.....	2,277	790	791	3,858	3,604	1,177	892	5,673
February.....	4,035	1,142	1,025	6,202	5,371	1,340	1,034	7,745
March.....	15,321	3,991	4,698	24,010	20,230	4,312	4,088	28,630
Totals.....	50,717	19,893	19,953	90,563	73,538	26,956	24,173	124,667

COMPARATIVE STATEMENT.

IMMIGRANTS arriving for Canada, by ports, for the Fractional Fiscal Year 1906-7 (nine months, ending March 31, 1907), and for the corresponding months of the Fiscal Year 1905-6.

	NINE MONTHS, JULY TO MARCH, INCLUSIVE, OF FISCAL YEAR 1905-6.				FRACTIONAL FISCAL YEAR 1906-7 (9 MONTHS, ENDING MARCH 31, 1907).			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
North Sydney.....					845	122	45	1,012
Halifax.....	8,244	2,499	2,362	13,105	12,354	3,151	2,687	18,192
St. John.....	5,316	1,434	1,307	8,057	7,855	2,110	1,676	11,641
Quebec.....	13,849	7,858	7,366	29,073	19,893	11,403	10,241	41,537
Vancouver.....	767	157	98	1,022	2,086	120	76	2,282
Victoria.....	219	38	11	268	2,044	207	42	2,293
Via United States Ocean Ports (New York, Portland, Boston, Baltimore and Philadelphia).....	4,144	1,110	1,058	6,312	8,798	2,198	2,055	13,051
From the United States.....	18,178	6,797	7,751	32,726	19,663	7,645	7,351	34,659
Totals.....	50,717	19,893	19,953	90,563	73,538	26,956	24,173	124,667

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COMPARATIVE STATEMENT.

IMMIGRANT arrivals from the United States, direct, by months, for the Fractional Fiscal Year 1906-7 (nine months, ending March 31, 1907), and for the corresponding months of the Fiscal Year 1905-6.

	NINE MONTHS, JULY TO MARCH, INCLUSIVE, OF FISCAL YEAR 1905-6.				FRACTIONAL FISCAL YEAR 1906-7 (9 MONTHS, ENDING MARCH 31, 1907).			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
July	1,858	796	813	3,467	2,967	1,164	1,019	5,150
August	1,767	699	695	3,161	2,463	870	834	4,167
September	1,717	710	687	3,114	2,331	892	829	4,052
October	2,349	844	935	4,128	2,857	1,135	1,103	5,095
November	2,085	749	850	3,684	2,306	963	960	4,229
December	1,261	505	580	2,346	1,298	533	509	2,340
January	894	292	339	1,525	973	381	321	1,675
February	1,204	441	469	2,114	896	329	295	1,520
March	5,043	1,761	2,383	9,187	3,572	1,378	1,481	6,431
Totals	18,178	6,797	7,751	32,726	19,663	7,645	7,351	34,659

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COMPARATIVE STATEMENT.

IMMIGRANTS arriving for Canada, by nationalities, during the Fractional Fiscal Year 1906-7 (nine months, ending March 31, 1907), and for the corresponding months of the Fiscal Year 1905-6, showing increase or decrease of each nationality.

Country.	Nine months, July to March, inclusive, Fiscal Year 1905-6.	Fractional Fiscal Year 1906-7, (9 months, ending Mar. 31, 1907.)	Increase.	Decrease.
English.....	29,993	41,156	11,163	
Welsh.....	429	502	73	
Scotch.....	5,846	10,729	4,883	
Irish.....	2,353	3,404	1,051	
Total British.....	38,621	55,791	17,170	
African, South.....	37	23		14
Australian.....	214	185		29
Austrian, N.E.S.*.....	349	562	213	
Bohemian.....	41	94	53	
Buckowinian.....	155	229	74	
Croatian.....	122	169	47	
Dalmatian.....	9	44	35	
Galician.....	995	1,652	657	
Hungarian, N.E.S.....	388	499	111	
Magyar.....	236	347	111	
Ruthenian.....	87	303	216	
Slovak.....	84	146	62	
Belgian.....	540	650	110	
Bulgarian.....	29	179	150	
Brazilian.....		5	5	
Chinese.....	13	92	79	
Dutch.....	125	394	269	
French.....	833	1,314	481	
German, N.E.S.....	833	1,889	1,056	
Alsace-Lorraine.....	4	1		3
Bavarian.....	19	1		18
Prussian.....	11	12	1	
Saxon.....	2			2
West Indian.....	59	64	5	
Bermudian.....	8	10	2	
Jamaican.....	10	16	6	
Greek.....	97	545	448	
Hebrew, N.E.S.....	539	544	5	
" Russian.....	3,730	5,802	2,072	
" Polish.....	31	49	18	
" Austrian.....	191	146		45
" German.....	28	43	15	
Italian.....	2,489	5,114	2,625	
Japanese.....	720	2,042	1,322	
Newfoundland.....	248	1,029	781	
New Zealand.....	57	30		27
Portuguese.....	3	2		1
Poles, N.E.S.....	68	144	76	
" Austrian.....	61	375	314	
" German.....	27	22		5
" Russian.....	225	492	267	
Persian.....	5	31	26	
Roumanian.....	190	431	241	
Russian, N.E.S.....	1,470	1,927	457	
Finns.....	708	1,049	341	
Doukhobors.....	204			204
Spanish.....	7	29	22	
Swiss.....	81	112	31	
Servian.....	15	4		11
Danish.....	290	297	7	
Icelandic.....	120	46		74

* N.E.S.—Not elsewhere specified.

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COMPARATIVE STATEMENT.—Immigrants arriving for Canada, by Nationalities.—*Con.*

Country.	Nine months, July to March, inclusive, Fiscal Year 1905-6.	Fractional Fiscal Year 1906-7. (9 months, ending Mar. 31, 1907.)	Increase.	Decrease.
Swedish....	991	1,077	86	
Norwegian....	655	876	221	
Turks....	144	232	88	
Armenians....	59	208	149	
Egyptians....	18	10		
Syrians....	276	277	1	
Arabians....	14	31	17	
U.S.A. Citizens (through Ocean Ports)....	69	89	20	
Negro....	1	108	107	
India....	182	2,124	1,942	
Total Continental, &c....	19,216	34,217	15,001	
United States (direct)....	32,726	34,659	1,933	
Total Immigration....	90,563	124,667	34,104	

ARRIVALS AT OCEAN PORTS.

For the fractional fiscal year 1906-7 (nine months, ending March 31, 1907), there arrived via Canadian and United States ocean ports, 133,146 passengers, of whom 13,544 travelled saloon and 119,602 steerage. Of the saloon passengers 12,444 were destined to Canada and 1,100 to the United States. Of the steerage passengers 101,715 were for Canada and 17,887 for the United States. Included in the steerage passengers for Canada were 9,293 returned Canadians and 2,414 tourists, leaving the immigration proper via ocean ports at 90,008 souls, which together with the 34,659 settlers direct from the United States, brings the total immigration to 124,667, an increase over the corresponding nine months of the previous fiscal year of 34,104 persons.

The following further statistical information will be of interest: Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

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TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at Ocean Ports for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South....	1			1					1			1
Australian	31	28	6	65	12	10	1	23	43	38	7	88
Austrian	9	1		10					9	1		10
Belgian	15	1	3	19					15	1	3	19
Chinese	7	9		16	1			1	8	9		17
Dutch	2	1		3	1			1	3	1		4
French	50	14	1	65	2	2		4	52	16	1	69
German	46	17		63	4	2		6	50	19		69
English	1,816	1,016	126	2,952	75	48	17	140	1,891	1,058	143	3,092
Welsh	10	5		15		2		2	10	7		17
Scotch	384	167	17	568	17	9	2	28	401	176	19	596
Irish	122	55	5	182	6	3		9	128	58	5	191
West Indian	10	10	4	24					10	10	4	24
Bermudian	26	32	10	68					26	32	10	68
Jamaican	2	2	1	5	1			1	3	2	1	6
Greek				1	1			1	1			1
Hebrew	1			1					1			1
Italian	6	1		7	3			3	9	1		10
Japanese	29	2		31	25	4		29	54	6		60
Newfoundland	204	84	9	297	41	21	6	68	245	105	15	365
New Zealand	11	7	3	21	5	2		7	16	9	3	28
Philippino				3				3	3			3
Portuguese	5	1		6					5	1		6
Polish	2			2					2			2
Roumanian		1		1						1		1
Russian, N.E.S.	14	3	3	20	2	2		4	16	5	3	24
Finn		1		1						1		1
Spanish	3	2		5					3	2		5
Swiss	3	2		5					3	2		5
Danish	3		1	4					3		1	4
Swedish	4			4	1	2		3	5	2		7
Norwegian	2	3		5	1			1	3	3		6
Syrian	3	1		4					3	1		4
U. S. A. Citizens ..	262	207	21	490	359	329	51	739	621	536	72	1,229
India	1	2		3	1			1	2			4
Canadians	2,211	2,074	223	4,508	6	5	1	12	2,217	2,079	224	4,520
Tourists	1,536	1,309	128	2,973	10	4		14	1,546	1,313	128	2,987
Totals	6,831	5,052	561	12,444	577	445	78	1,100	7,408	5,497	639	13,544

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at Ocean Ports for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South.....	15	3	5	23	1		5		16	3	10	29
Australian.....	81	45	59	185	87	32	33	15	168	77	92	337
Austrian, N.E.S.....	418	83	61	562	126	64	44	23	544	147	107	796
Bohemian.....	32	33	29	94	7	8	5	2	39	41	34	114
Buckowinian.....	147	29	53	229					147	29	53	229
Croatian.....	150	11	8	169	45			45	195	11	8	214
Dalmatian.....	44			44	1			1	45			45
Galician.....	1,047	318	287	1,652	41	22	10	73	1,088	340	297	1,725
Hungarian, N.E.S.....	350	76	73	499	54	42	41	137	404	118	114	636
Magyar.....	245	58	44	347					245	58	44	347
Ruthenian.....	248	33	22	303					248	33	22	303
Slovak.....	120	14	12	146					120	14	12	146
Belgian.....	361	167	122	650	90	38	34	162	451	205	156	812
Bulgarian.....	178		1	179	110		1	111	288		2	290
Brazilian.....	3			3	5				3	2		5
Chinese.....	63	9	20	92	12			12	75	9	20	104
Dutch.....	217	97	80	394	29	18	25	72	246	115	105	466
French.....	725	348	241	1,314	54	24	14	92	779	372	255	1,406
German, N.E.S.....	809	488	592	1,889	219	199	221	639	1,028	687	813	2,528
Alsace-Lorraine.....	1			1					1			1
Bavarian.....	1			1					1			1
Prussian.....	6	4	2	12	3	3	10	16	9	7	12	28
English.....	22,819	9,470	8,867	41,156	1,020	536	331	1,887	23,839	10,006	9,198	43,043
Welsh.....	324	103	75	502	33	9	3	45	357	112	78	547
Scottish.....	6,487	2,464	1,778	10,729	405	131	90	626	6,892	2,595	1,868	11,355
Irish.....	1,961	1,030	413	3,404	161	93	48	302	2,122	1,123	461	3,706
West Indian.....	26	27	11	64	4			4	30	27	11	68
Bermudian.....	8	2		10					8	2		10
Jamaican.....	9	7		16					9	7		16
Greek.....	489	22	34	545	134	3	1	138	623	25	35	683
Hebrew, N.E.S.....	212	179	153	544	19	17	15	51	231	196	168	595
" Russian.....	2,238	1,641	1,923	5,802	79	91	90	260	2,317	1,732	2,013	6,062
" Polish.....	32	9	8	49	1			1	33	9	8	50
" Austrian.....	67	40	39	146					67	40	39	146
" German.....	18	11	14	43	1			1	19	11	14	44
Italian.....	4,430	384	300	5,114	135	20	12	167	4,565	404	312	5,281
Japanese.....	1,766	242	34	2,042	1,002	120	27	1,149	2,768	362	61	3,191
Newfoundland.....	819	167	43	1,029	168	119	23	310	987	286	66	1,339
New Zealand.....	23	7		30	24	6	4	34	47	13	4	64
Portuguese.....	2			2	2			2	4			4
Poles, N.E.S.....	106	21	17	144	48	17	19	84	154	38	36	228
" Austrian.....	270	5	4	379					270	56	49	375
" German.....	12	3	2	17	3	1	1	5	15	4	8	27
" Russian.....	345	72	75	492	32	17	12	61	377	89	87	553
Persian.....	26	2	3	31	7	1		8	33	3	3	39
Roumanian.....	259	84	88	431	14	12	12	38	273	96	100	469
Russian, N.E.S.....	999	425	503	1,927	1,241	677	656	2,574	2,240	1,102	1,159	4,501
Finn.....	774	205	70	1,049	1,444	504	233	2,181	2,218	709	303	3,230
Spanish.....	21	4	4	29	5	3	2	10	26	7	6	39
Swiss.....	68	28	16	112	14	5	1	20	82	33	17	132
Servian.....	4			4	2	1		3	6	1		7
Danish.....	149	92	56	297	167	91	62	320	316	183	118	617
Icelandic.....	17	12	17	46	1	1	2	4	18	13	19	50
Swedish.....	600	258	219	1,077	630	380	238	1,248	1,230	638	457	2,325
Norwegian.....	484	227	165	876	1,024	568	348	1,940	1,508	795	513	2,816
Turks.....	209	15	8	232	81	2		83	290	17	8	315
Armenians.....	148	35	25	208	27	5	6	38	175	40	31	246
Egyptians.....	4	2	4	10	1			1	5	2	4	11
Syrians.....	132	81	64	277	22	9	6	37	154	90	70	314

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at Ocean Ports for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).—*Concluded.*

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Arabians.....	18	10	3	31	659	637	149	1,445	18	10	3	31
U.S.A. Citizens.....	53	17	19	89	5	.....	.....	5	712	654	168	1,534
Negro	66	37	5	108	8	.....	.....	8	71	37	5	113
India.....	2,120	2	2	2,124	.....	.....	.....	.....	2,128	2	2	2,132
Total Immigration..	53,875	19,311	16,822	90,008	9,502	4,526	2,834	16,862	63,377	23,837	19,656	106,870
Returned Canadians.	6,411	2,148	734	9,293	.....	.....	.....	.....	6,411	2,148	734	9,293
Tourists.....	1,637	654	123	2,414	898	78	49	1,025	2,535	732	172	3,439
Totals.....	61,923	22,113	17,679	101,715	10,400	4,604	2,883	17,887	72,323	26,717	20,562	119,602

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TABLE III.

MONTHLY arrivals of Immigrants for Canada by Nationalities, at Ocean Ports, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
African, South.....	4	5	1	1	.....	.....	.....	6	6	23
Australian.....	47	38	13	12	9	3	8	26	29	185
Austrian, N.E.S.....	28	32	32	26	39	23	24	12	346	562
Bohemian.....	6	25	22	13	12	14	.....	.....	2	94
Buckowinian.....	72	39	24	4	35	9	3	6	37	229
Croatian.....	17	9	28	18	33	10	7	10	37	169
Dalmatian.....	3	4	2	4	5	2	.....	23	1	44
Galician.....	384	100	150	33	162	92	42	71	618	1,632
Hungarian, N.E.S.....	20	18	19	41	73	35	51	30	212	499
Magyar.....	15	26	46	42	42	38	22	78	38	347
Ruthenian.....	11	13	29	21	33	76	23	35	62	303
Slovak.....	13	.....	12	11	21	13	12	18	46	146
Belgian.....	107	72	86	73	60	26	39	31	156	650
Bulgarian.....	7	12	13	10	47	51	5	4	30	179
Brazilian.....	.....	.....	.....	.....	.....	5	.....	.....	.....	5
Chinese.....	1	15	6	11	15	2	7	32	3	92
Dutch.....	41	45	28	20	22	17	22	30	169	394
French.....	356	136	145	221	98	55	48	75	180	1,314
German, N.E.S.....	271	133	226	368	239	246	194	51	141	1,880
Alsace-Lorraine.....	1	.....	.....	.....	.....	1	.....	.....	.....	1
Bavarian.....	.....	.....	.....	.....	.....	7	.....	.....	.....	12
Prussian.....	2	1	1	1	.....	.....	.....	.....	.....	.....
English.....	6,361	6,727	4,661	3,843	2,244	1,716	986	2,675	11,949	41,156
Welsh.....	56	104	73	59	44	29	19	31	87	502
Scotch.....	1,691	1,278	1,255	1,113	733	519	402	794	2,944	10,729
Irish.....	542	681	460	414	218	148	85	211	645	3,404
West Indian.....	17	8	21	5	4	8	.....	.....	1	64
Bermudian.....	4	4	1	.....	.....	.....	1	.....	.....	10
Jamaican.....	1	1	12	2	.....	.....	.....	.....	.....	16
Greek.....	45	49	31	103	80	32	41	37	127	545
Hebrew, N.E.S.....	55	59	90	13	101	50	97	27	52	544
" Russian.....	920	1,004	1,005	477	551	702	391	397	355	5,802
" Polish.....	1	.....	1	1	3	14	12	8	9	49
" Austrian.....	11	15	34	10	30	19	8	13	6	146
" German.....	.....	7	1	16	5	8	1	3	2	43
Italian.....	427	402	389	406	343	384	197	454	2,112	5,114
Japanese.....	344	257	159	291	213	175	165	183	255	2,042
Newfoundland.....	40	26	40	33	14	10	533	127	206	1,029
New Zealand.....	7	8	4	3	2	1	1	2	2	30
Portuguese.....	.....	1	1	1	.....	.....	.....	.....	.....	2
Poles, N.E.S.....	14	21	7	12	4	8	6	25	47	144
" Austrian.....	29	41	33	31	55	69	29	35	53	375
" German.....	12	2	.....	2	1	.....	.....	1	4	22
" Russian.....	112	70	30	35	47	57	20	44	77	492
Persian.....	1	5	.....	.....	.....	.....	25	.....	.....	31
Roumanian.....	72	23	22	27	92	56	22	76	41	431
Russian, N.E.S.....	126	161	239	153	310	164	125	211	438	1,927
Finns.....	93	121	135	159	139	143	56	97	106	1,049
Spanish.....	5	8	12	3	.....	.....	1	.....	.....	29
Swiss.....	29	11	22	9	9	1	6	7	18	112
Servian.....	1	.....	1	1	.....	.....	.....	.....	.....	4
Danish.....	38	54	30	39	31	18	16	17	54	297
Icelandic.....	35	1	10	.....	.....	.....	.....	.....	.....	46
Swedish.....	233	150	159	127	107	67	25	34	175	1,077
Norwegian.....	152	155	119	101	73	37	26	44	169	876
Turks.....	7	20	20	13	23	42	27	24	47	232
Armenians.....	6	16	13	4	7	12	56	71	23	208
Egyptians.....	.....	.....	1	1	1	.....	.....	1	6	10
Syrians.....	23	6	22	8	54	47	83	20	14	277
Arabians.....	5	.....	.....	2	17	2	4	1	.....	31
U.S.A. Citizens.....	26	17	11	7	5	5	10	5	8	108
Negro.....	57	3	12	11	9	6	.....	2	3	8
India.....	203	588	265	242	711	33	21	10	51	2,124
Totals.....	13,207	12,856	10,283	8,707	7,225	5,308	3,998	6,225	22,199	90,068

TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, at Ocean Ports, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Agriculturists.	2,529	3,087	1,817	1,594	1,005	765	478	932	5,984	18,191
General labourers.. .	3,690	2,742	2,270	2,105	2,628	1,749	1,495	2,239	7,889	26,807
Mechanics.....	4,106	3,679	3,276	2,535	1,866	1,444	980	1,670	4,858	24,414
Clerks.....	959	967	878	783	585	427	395	539	1,153	6,686
Miners.....	426	519	501	364	243	180	102	238	305	2,878
Female servants.....	784	680	706	573	453	330	148	215	694	4,583
Not classed.....	713	1,182	835	753	445	413	400	392	1,316	6,449
Totals.....	13,207	12,856	10,283	8,707	7,225	5,308	3,998	6,225	22,199	90,008
Maritime Provinces.. .	535	608	587	319	430	466	879	617	2,050	6,491
Quebec.....	2,837	2,460	2,738	1,925	1,878	1,231	785	1,427	2,782	18,063
Ontario.....	4,709	4,301	3,537	3,292	2,240	1,974	1,224	2,007	8,981	32,265
Manitoba.....	2,885	3,147	1,508	1,198	884	764	430	1,094	5,126	17,056
Saskatchewan.....	696	517	491	495	324	226	198	222	1,088	4,257
Alberta.....	477	451	437	420	249	216	165	208	911	3,474
British Columbia.....	1,062	1,372	983	1,058	1,219	431	377	650	1,254	8,406
Yukon.....	6	2	1	7	16
Totals.....	13,207	12,856	10,283	8,707	7,225	5,308	3,998	6,225	22,199	90,008

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant Arrivals for ending March

Nationality.	SEX.				TRADE OR								
	Males.	Females.	Children.	Totals.	Farmers, or Farm Labourers Class.			General Labourers.			Mechanics.		
					Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
African, South...	15	3	5	23	3			3	1		1		2
Australian	81	45	59	185	12	3	6	11			17	5	4
Austrian, N.E.S.	418	83	61	562	128	8	12	221	13	13	42	14	15
Bohemian	32	33	29	94	2	5	9	18	3	2	4	4	1
Buckowinian	147	29	53	229	28	10	20	106	10	18	11	4	15
Croatian	156	11	8	169	40	3	4	99	2		2	1	1
Dalmatian	44			44				44					
Galician	1,047	318	287	1,652	200	73	126	769	94	127	65	22	14
Hungarian, N.E.													
S	350	76	73	499	119	14	16	194	30	49	30	2	
Magyar	245	58	44	347	11	2		222	21	16	9	2	3
Ruthenian	248	33	22	303	12			230	18	18	5		
Slovak	120	14	12	146	4			112	1	2	3		
Belgian	361	167	122	650	120	53	73	83	14	6	76	37	25
Bulgarian	178		1	179	53		1	121			2		
Brazilian	3	2		5	3	2							
Chinese	63	9	20	92	3			7					
Dutch	217	97	80	394	77	32	45	34	10	10	82	26	17
French	725	348	241	1,314	318	93	105	77	14	14	110	56	51
German, N.E.S.	809	488	592	1,889	258	163	307	241	63	123	211	65	56
Alsace-Lorraine..	1			1							1		
Bavarian	1			1							1		
Prussian	6	4	2	12	1			5	1	2		1	
English	22,819	9,470	8,867	41,156	6,407	1,550	1,720	5,334	1,245	1,698	7,517	2,902	3,054
Welsh	324	103	75	502	88	18	19	70	16	20	74	19	14
Scotch	6,487	2,464	1,778	10,729	1,409	307	374	2,001	157	184	2,087	708	702
Irish	1,961	1,030	413	3,404	581	109	102	539	79	87	404	198	136
West Indian	26	27	11	64	1			6			8	3	7
Bermudian	8	2		10				1			3	1	
Jamaican	9	7		16	1			1			3		
Greek	489	22	34	545	39	2		404	4	10	26	9	12
Hebrew, N.E.S.	212	179	153	544	15	7	14	48	10	10	127	103	92
" Russian..	2,238	1,641	1,923	5,802	131	67	113	435	156	260	1,491	888	1,027
" Polish...	32	9	8	49				2			30	7	6
" Austrian	67	40	49	146	6	3	9	23	3	4	30	21	12
" German..	18	11	14	43	3	1	4	2	1		10	9	10
Italian	4,430	384	390	5,114	248	6	9	3,836	182	196	228	20	10
Japanese	1,766	242	34	2,042	444	31	2	241	15	6	46	5	
Newfoundland...	819	167	43	1,029	2	1	1	735	10	7	26	6	1
New Zealand	23	7		30	5	1		3			9	1	
Portuguese	2			2	1			1					
Poles, N.E.S.	106	21	17	144	9	2	4	75	4	5	19	6	4
" Austrian..	270	56	49	375	5	1	6	239	16	25	23	5	4
" German..	12	3	7	22	2	1	7	8					
" Russian..	345	72	75	492	25	2	3	212	19	31	89	22	26
Persian	26	2	3	31	20	1	2	1			4	1	1
Romanian	259	84	88	431	25	8	15	209	17	32	20	26	29
Russian, N.E.S.	999	425	503	1,927	275	85	188	466	88	135	185	94	73
Finn	774	205	70	1,049	72	4	3	636	44	55	31	12	6
Spanish	21	4	4	29	12	1		3	1	4			
Swiss	68	28	16	112	19	5	13	17	2		18	6	2
Servian	4			4	1						2		
Danish	149	92	56	297	44	17	23	49	8	11	43	11	10
Icelandic	17	12	17	46	5	5	10	8		1	2	1	1
Swedish	600	258	219	1,077	138	35	78	343	55	73	79	23	42
Norwegian	484	227	165	876	134	39	56	249	38	43	77	28	30

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V.

Canada, at Ocean Ports, for the Fractional Fiscal Year 1906-7 (9 months, 31, 1907).

OCCUPATION.										DESTINATION.							
Clerks, Traders, &c.			Miners.			Female Servants.	Not Classified.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.								
5		1				1	3	1	2	3	4	10	6				
25	12	10	5	4	6	2	11	19	33	7	16	18	11	3	11	119	
15	6	10	5	2	2	30	7	10	9	23	245	74	129	38	18	30	
			7	10	13	8	1	3	4	20	5	6	6	14	16	27	
			2			5				7	48	36	79	53	5	1	
						3	9	2	3	2	114	26	2	2	7		
											1	33	4		6		
4	2	3	5	3	3	107	4	17	14	52	278	290	915	84	104	19	
1			5	2		20	1	8	8	45	40	168	97	116	26	7	
1			2			15		18	25	86	7	131	66	38	16	3	
			1			19		5	4	6	69	103	105	11	4		
			1			8		5	10	3	2	35	19	1	45	40	1
29	8	1	38	12	9	31	15	12	8	49	233	20	207	31	85	25	
1											5	172	1			1	
													5				
42	5	12					11	4	8	1	15	7	1			64	
16	2		2	1	1	16	6	10	7	23	58	86	170	27	18	12	
85	25	22	7	1	2	37	128	122	47	33	594	111	349	127	77	23	
60	11	14	11	7	23	101	28	78	69	43	257	218	820	354	174	22	1
													1				
													1				
													2				
1,985	790	547	910	294	441	1,881	666	808	1,407	2,808	6,314	18,214	8,199	2,053	1,675	1,855	8
33	10	6	48	5	9	24	11	11	7	16	74	205	122	16	17	42	
590	203	130	250	118	263	759	150	212	125	1,071	2,007	3,782	2,359	481	497	529	3
313	96	43	43	15	20	428	81	105	25	199	713	1,343	772	122	145	119	
5						17	6	7	4	33	6	24	1				
3						1	1			9				1			
4						7											
14	2	1				3	6	2	11	16	215	294	4			16	
20	11	17				36	2	12	20	10	313	101	84	23	13		
139	135	242	14	5	3	220	28	170	278	211	2,864	1,784	814	42	57	30	
7	2	1				1		1	2	6	26	14	3				
3						4	1	7	13	11	62	63	9	1			
34	5	2	67	2	1	87	17	82	82	145	1,725	2,274	90	5	119	765	
492	46	4	5			23	538	122	22	2		1			1	2,038	
12	1		32			46	12	103	34	969	21	25	2		10	1	
4	1		2			2		2			2	8	8		2	10	
											1		1				
			3			6		3	4	1	64	35	43		1		
			2			21	1	13	14	24	108	75	121	14	31	2	
			2			1				3	1	6	12				
10	3	6	6	1		17	3	8	9	20	210	188	62		7	5	
1										1	6						
5	3	4				27		3	8	4	270	73	45	39			
33	19	33	20	1	3	93	20	45	71	72	507	339	580	246	40	141	2
			31	3	2	138	4	4	4	23	66	847	15	15	34	49	
4						1	2	1			11	6	11				
8						8	6	7	1	2	35	29	23	6	13	4	
1											2		1	1			
11	1		2	1	3	48		6	9	6	89	43	89	20	42	8	
1						6	1		5		2		42				
6	3	3	30	4	4	127	4	11	19	59	86	368	271	98	97	98	
11	1		7	6	4	102	6	13	32	49	71	243	198	112	72	131	

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant Arrivals for
ending March

Nationality.	SEX.				TRADE OR								
					Farmers, or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
Turks	209	15	8	232	36	.....	.....	152	5	5	10	1	.....
Armenians	148	35	25	208	13	2	.....	96	7	10	21	6	3
Egyptians	4	2	4	10	.....	.....	.....	1	.....	.....	1	.....	.....
Syrians	132	81	64	277	13	9	13	70	19	19	15	10	4
Arabians	18	10	3	31	.....	.....	.....	9	3	.....	1	1	2
U.S.A. Citizens.	53	17	19	89	8	4	7	19	2	5	12	5	1
Negro	66	37	5	108	2	.....	.....	17	1	.....	39	6	1
India	2,120	2	2	2,124	256	.....	.....	1,811	.....	.....	1	1	.....
Totals	53,875	19,311	16,822	90,008	11,887	2,785	3,519	20,969	2,502	3,336	13,483	5,405	5,526

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V.

Canada, at Ocean Ports, for the Fractional Fiscal Year 1906-7 (9 months, 31, 1907).

OCCUPATION.

DESTINATION.

Clerks, Traders, &c.			Miners.			Female Servants.	Not Classified.			Maritime Provinces.							
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.		Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
6	1	.....	.....	.....	.....	7	5	1	3	16	43	163	.....	.....	.....	10	.....
14	4	2	.....	.....	.....	3	4	13	10	53	78	73	.....	.....	.....	4	.....
1	2	4	.....	.....	.....	.....	1	.....	.....	6	3	1	.....	.....	.....	.....	.....
32	16	16	.....	.....	.....	12	2	15	12	137	96	23	4	16	.....	1	.....
8	3	1	.....	.....	.....	3	.....	.....	.....	1	27	3	.....	.....	.....	.....	.....
6	1	.....	2	1	1	1	6	3	5	24	16	15	5	14	5	10	.....
4	.....	.....	.....	.....	.....	28	4	2	4	79	7	20	1	.....	.....	1	.....
14	1	2	.....	.....	.....	.....	58	.....	.....	.....	5	5	1	.....	12,112	.....	.....
4,118	1,431	1,137	1,567	498	813	4,583	1,851	2,107	2,491	6,491	18,063	32,265	17,036	4,257	3,474	8,406	16

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PORT OF NORTH SYDNEY.

The collection of immigration statistics at this port is new. According to the returns received by the department for the last three months of the fractional fiscal year, there arrived at the port of North Sydney, 2,013 passengers, of whom 626 travelled saloon and 1,387 steerage. Of the saloon passengers 541 were destined to Canada and 85 to the United States. Of the steerage passengers 1,117 were for Canada and 270 for the United States. Included in the steerage passengers for Canada were 94 returned Canadians and 11 tourists, leaving the immigration proper at 1,012 souls.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of North Sydney for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South	1			1					1			1
Chinese	1			1					1			1
French					1			1				
English.....	38	3		41	1			1	39	3		42
Scotch.....	12			12					12			12
Irish.....	4	1		5					4	1		5
West Indian	2			2					2			2
Jamaican	1			1				1	1			1
Italian	1			1					1			1
Newfoundland..	176	45	3	224	36	9	2	47	212	54	5	271
Russian.....	1			1					1			1
Spanish.....	2	1		3					2	1		3
Danish.....	1			1					1			1
Swedish.....	3			3					3			3
Norwegian.....	1			1					1			1
Syrian	3	1		4					3	1		4
U. S. A. Citizens.....	33	20		53	22	3	2	27	55	23		80
Canadians.....	153	16	2	171					153	16	2	171
Tourists.....	15	2		17	6	2		8	21	4		25
Totals.....	447	89	5	541	67	14	4	85	514	103	9	626

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of North Sydney for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Austrian					4			4	4			4
Chinese	2			2					2			2
French	5			5					5			5
German	4			4	4	2	2	8	8	2	2	12
English	10			10					10			10
Welsh	2			2					2			2
Scotch	1			1					1			1
Irish	3			3	2			2	5			5
Greek	1			1					1			1
Newfoundland	738	88	25	851	109	69	2	180	847	157	27	1,031
Persian	1			1					1			1
Russian	4	6	8	18	9	6	2	17	13	12	10	35
Danish	1			1					1			1
Norwegian	2			2					2			2
Turks	3			3	4			4	7			7
Armenians	25	11	2	38	23	3		26	48	14	2	64
Egyptians					1			1	1			1
Syrians	33	16	10	59	4	3		7	37	19	10	66
U.S.A. Citizens	10	1		11	6		4	10	16	1	4	21
Total immigration	845	122	45	1,012	166	83	10	259	1,011	205	55	1,271
Returned Canadians	93	1		94					93	1		94
Tourists	8	3		11	9	1	1	11	17	4	1	22
Totals	946	126	45	1,117	175	84	11	270	1,121	210	56	1,387

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TABLE III.

MONTHLY arrivals of Immigrants for Canada by Nationalities at the Port of North Sydney for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	Jan.	Feb.	March.	Totals.
Chinese.....	1	1		2
French.....	5			5
German.....	4			4
English.....	7	3		10
Welsh.....	2			2
Scotch.....		1		1
Irish.....	2	1		3
Greek.....	1			1
Newfoundland....	523	126	202	851
Persian.....	1			1
Russian.....	18			18
Danish.....	1			1
Norwegian.....	2			2
Turks.....	3			3
Armenians.....	38			38
Syrians.....	59			59
U.S.A. citizens..	9	2		11
Totals.....	676	134	202	1,012

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada by Occupations and Destination at the Port of North Sydney for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	Jan.	Feb.	March.	Totals.
Agriculturists.....				
General labourers.....	486	80	190	756
Mechanics.....	13	7		20
Clerks.....	60	4	1	65
Miners.....	2	27		29
Female servants.....	6	5		11
Not classed.....	109	11	11	131
Totals.....	676	134	202	1,012
Maritime Provinces.....	633	120	184	937
Quebec.....	12	10	3	25
Ontario.....	21	1	7	29
Manitoba.....		2	1	3
Saskatchewan.....				
Alberta.....		1		1
British Columbia.....	10		6	16
Yukon.....			1	1
Totals.....	676	134	202	1,012

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TABLE

NATIONALITY, Sex, Occupation and Destination of Immigrant arrivals for
(9 months, ending

Nationality.	SEX.				TRADE OR								
					Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
Chinese.	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
French.	5	.....	.....	5	.....	.....	.....	4	.....	.....	.....	.....	.....
German.	4	.....	.....	4	.....	.....	.....	1	.....	.....	2	.....	.....
English.	10	.....	.....	10	.....	.....	.....	9	.....	.....	.....	.....	.....
Welsh.	2	.....	.....	2	.....	.....	.....	2	.....	.....	.....	.....	.....
Scotch.	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Irish.	3	.....	.....	3	.....	.....	.....	2	.....	.....	.....	.....	.....
Greek.	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Newfoundland.	738	88	25	851	.....	.....	.....	687	8	5	9	5	1
Persian.	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Russian.	4	6	8	18	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danish.	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Norwegian.	2	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....
Turks.	3	.....	.....	3	.....	.....	.....	1	.....	.....	.....	.....	.....
Armenians.	25	11	2	38	.....	.....	.....	13	.....	.....	1	.....	.....
Syrians.	33	16	10	59	11
U. S. A. Citizens.	10	1	11	9	1	1
Totals.	845	122	45	1,012	742	9	5	14	5	1

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V.

Canada at the Port of North Sydney for the Fractional Fiscal Year 1906-7
March 31, 1907).

OCCUPATION.									DESTINATION.							
Clarks, Traders, &c.			Miners.			Not Classed.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.								
1						1			1	1						
						1			5							
1						1			4			1				
									9							
									3			1				
									1							
1			1						3							
8	1		28		11	6	63	19	79	20	20	2		1	10	1
									1							
2	2	2				2	4	6	11	2					5	
									1							
						1			2						1	
2									1		1					
10	3					1	8	2	28	2	8					
21	8	3				1	8	7	59							
									11							
46	14	5	29			11	83	34	937	25	29	3		1	16	1

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PORT OF HALIFAX.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907) there arrived at the port of Halifax 28,348 passengers, of whom 5,742 travelled saloon and 22,606 steerage. Of the saloon passengers 5,711 were destined to Canada and 31 to the United States. Of the steerage passengers 20,077 were for Canada and 2,529 for the United States. Included in the steerage passengers for Canada were 1,683 returned Canadians and 202 tourists, leaving the immigration proper at 18,192 souls, an increase over the corresponding nine months of the previous fiscal year of 5,087 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of Halifax for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Austrian.....	3			3					3			3
Belgian.....	1			1					1			1
French.....	4	1		5					4	1		5
German.....	2			2					2			2
English.....	185	73	16	274					185	73	16	274
Welsh.....	1			1					1			1
Scotch.....	24	5		29					24	5		29
Irish.....	8	4		12					8	4		12
West Indian.....	1	4		5					1	4		5
Bermudian.....		3		3						3		3
Jamaican.....		2	1	3						2	1	3
Newfoundland.....	26	39	6	71	5	12	4	21	31	51	10	92
New Zealand.....	1	1	3	5					1	1	3	5
Norwegian.....		1		1						1		1
U.S.A. Citizens.....	186	140	14	340	7	1		8	193	141	14	348
Canadians.....	1,138	1,171	112	2,421	1	1		2	1,139	1,172	112	2,423
Tourists.....	1,285	1,142	108	2,535					1,285	1,142	108	2,535
Totals.....	2,865	2,586	260	5,711	13	14	4	31	2,878	2,600	264	5,742

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Halifax for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South.....	4			4					4			4
Australian.....	7	2	3	12	1	1		2	8	3	3	14
Austrian, N. E. S.....	21	5	11	37	15	9	9	33	36	14	20	70
Buckowinian.....	1	1		2					1	1		2
Croatian.....					1			1	1			1
Galician.....	30	7	4	41					30	7	4	41
Hungarian.....	2	1	1	4	1	1	2	4	3	2	3	8
Belgian.....	57	20	14	91	19	7	9	35	76	27	23	126
Bulgarian.....	33		1	34	70			70	103		1	104
Brazilian.....	3	2		5					3	2		5
Chinese.....	10			10					10			10
Dutch.....	110	44	33	187	8			8	118	44	33	195
French.....	146	31	22	199	13	2		15	159	33	22	214
German, N. E. S.....	121	59	89	269	29	15	25	69	150	74	114	338
Bavarian.....	1			1					1			1
English.....	6,771	1,630	1,467	9,868	111	42	7	160	6,882	1,672	1,474	10,028
Welsh.....	48	6	3	57	4	1		5	52	7	3	62
Scotch.....	2,636	516	416	3,568	31	9	16	56	2,667	525	432	3,624
Irish.....	389	118	59	566	16	6	2	24	405	124	61	590
West Indian.....	6	5	7	18	1			1	7	5	7	19
Bermudian.....	3			3					3			3
Jamaican.....	2	4		6					2	4		6
Greek.....	160	6	8	174	99	2	1	102	259	8	9	276
Hebrew, N. E. S.....	46	37	36	119	2	6		8	48	39	42	129
" Russian.....	385	302	315	1,002	11	9	8	28	396	311	323	1,030
" Polish.....	21	8	6	35	1			1	22	8	6	36
" Austrian.....	14	7	1	22					14	7	1	22
" German.....	3	1		4					3	1		4
Italian.....	257	13	6	276	27	8	5	40	284	21	11	316
Newfoundland.....	80	78	18	176	59	50	21	130	139	128	39	306
New Zealand.....	2			2					2			2
Poles, N. E. S.....	8	1		9	14	2		16	22	3		25
" Austrian.....	2			2					2			2
" Russian.....	26	7	8	41	2			2	28	7	8	43
Persian.....	24	2	3	29	7	1		8	31	3	3	37
Roumanian.....	2	5		7	6	2		8	8	7		15
Russian, N. E. S.....	222	62	58	342	377	73	49	499	599	135	107	841
Finns.....	208	45	9	262	459	105	30	594	667	150	39	856
Spanish.....	1			1					1			1
Swiss.....	14	6		20	1			1	15	6		21
Servian.....	1			1					1			1
Danish.....	27	14	4	45	32	11	7	50	59	25	11	95
Swedish.....	96	27	22	145	82	20	7	109	178	47	29	254
Norwegian.....	112	14	13	139	198	53	20	271	310	67	33	410
Turks.....	40			40	72	1		73	112	1		113
Armenians.....	80	21	21	122	4	2	6	12	84	23	27	134
Egyptians.....	2	1	4	7					2	1	4	7
Syrians.....	57	30	21	108	15	5	6	26	72	35	27	134
Arabians.....	5	2		7					5	2		7
U. S. A. Citizens.....	9	3	3	15	42	6	8	56	51	9	11	71
Negro.....	48	8	1	57	4			4	52	8	1	61
India.....	1			1					1			1
Total Immigration.....	12,354	3,151	2,687	18,192	1,834	445	244	2,523	14,188	3,596	2,931	20,715
Returned Canadians..	1,311	247	125	1,683					1,311	247	125	1,683
Tourists.....	140	54	8	202	4	2		6	144	56	8	208
Totals.....	13,805	3,452	2,820	20,077	1,838	447	244	2,529	15,643	3,899	3,064	22,606

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TABLE III.

MONTHLY arrivals of Immigrants for Canada, by Nationalities, at the Port of Halifax, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	August.	September.	October.	November.	December.	January.	February.	March.	Totals.
African, South.....								1	3	4
Australian.....	2	1			1	1		2	5	12
Austrian, N.E.S.....					2	15	7	4	9	37
Buckowinian.....					1			1		2
Galician.....			2		6	6	4	7	16	41
Hungarian.....	2									4
Belgian.....			4	12		7	18	10	40	91
Bulgarian.....						22	2		10	34
Brazilian.....						5				5
Chinese.....								10		10
Dutch.....		5			4	11	11	8	148	187
French.....						44	18	29	108	199
German, N.E.S.....	1		1		6	87	115	18	41	269
Bavarian.....						1				1
English.....	165	284	242	40	324	616	381	828	6,988	9,868
Welsh.....			1		1	6	5	5	39	57
Scotch.....	91	58	47	58	89	245	329	404	2,247	3,568
Irish.....	5	25	8	11	22	53	29	58	355	566
West Indian.....	4	3				1				18
Bermudian.....	1						1			3
Jamaican.....			6							6
Greek.....						21	26	33	94	174
Hebrew, N.E.S.....	2		4		1	19	57	15	21	119
" Russian.....	2		4		114	347	189	158	188	1,092
" Polish.....	1		1			10	10	7	6	35
" Austrian.....			1		1	11	3	3	3	22
" German.....								2	2	4
Italian.....	1	1				77	35	44	118	276
Newfoundland.....	40	25	40	33	13	10	10	1	4	176
New Zealand.....									2	2
Poles, N.E.S.....						1		2	6	9
" Austrian.....						1		1		2
" Russian.....						4	6	12	19	41
Persian.....		5					24			29
Roumanian.....					2	4			1	7
Russian, N.E.S.....					5	27	34	147	129	342
Finns.....	3		1		35	75	36	35	77	262
Spanish.....							1			1
Swiss.....					1	1	5	5	8	20
Servian.....						1				1
Danish.....					10	7	10	8	10	45
Swedish.....			6	1	18	36	8	7	69	145
Norwegian.....					18	7	9	20	85	139
Turks.....						1	7	24	8	40
Armenians.....		11			2	8	13	65	23	122
Egyptians.....								1	6	7
Syrians.....	3	1			20	36	15	20	13	108
Arabians.....						2	4	1		7
U.S.A. Citizens.....	3	2	4		2	2			2	15
Negro.....	47			8	2					57
India.....									1	1
Totals.....	373	421	381	164	700	1,828	1,423	1,996	10,906	18,192

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada by Occupations and Destination at the Port of Halifax for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	Totals.
Agriculturists	24	16	14	9	69	319	286	403	3,670	4,810
General labourers	52	32	26	19	109	407	374	650	3,148	4,817
Mechanics.	78	66	62	9	238	622	502	510	2,772	4,853
Clerks.	16	3	11	3	48	160	129	159	518	1,047
Miners	154	260	188	88	135	112	39	76	171	1,223
Female servants	8	27	24	17	60	117	42	91	322	708
Not classed.....	41	23	56	19	41	91	51	107	305	734
Totals.	373	421	381	164	700	1,828	1,423	1,996	10,906	18,192
Maritime Provinces.....	366	409	367	155	288	297	187	223	1,403	3,695
Quebec.....	.....	6	2	3	121	520	345	587	957	2,741
Ontario.....	2	5	8	6	176	631	516	639	4,439	6,422
Manitoba.....	5	1	3	.....	81	227	221	373	2,838	3,749
Saskatchewan.....	.....	.....	.....	.....	17	55	87	74	590	823
Alberta.....	.....	.....	.....	.....	7	58	40	44	416	565
British Columbia	1	10	40	27	56	263	397
Yukon
Totals.....	373	421	381	164	700	1,828	1,423	1,996	10,906	18,192

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals
(9 months, ending

Nationality.	SEX.			TRADE CR										
				Farmers or Farm Labourers Class.			General Labourers.			Mechanics.				
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.	
African, South.....	4			4	2									
Australian.....	7	2	3	12	3	1	2							
Austrian, N.E.S.....	21	5	11	37	3			6			7	2	3	
Buckowinian.....	1	1		2	1	1								
Galician.....	30	7	4	41	16	1	2	7	2	2	5	1		
Hungarian.....	2	1	1	4				2	1	1				
Belgian.....	57	20	14	91	27	8	6	4	1	1	9	2	2	
Bulgarian.....	33		1	34	10		1	23						
Brazilian.....	3	2		5	3	2								
Chinese.....	10			10										
Dutch.....	110	44	33	187	42	16	20	11	4	4	48	7	8	
French.....	146	31	22	199	76	15	11	22	3	2	15	1	2	
German, N.E.S.....	121	59	89	269	57	36	68	25	1	5	28	11	12	
Bavarian.....	1			1							1			
English.....	6,771	1,630	1,467	9,868	2,272	384	447	1,677	169	204	1,906	403	394	
Welsh.....	48	6	3	57	18	3	3	9			9			
Scottish.....	2,636	516	416	3,568	477	80	83	1,364	25	19	524	111	111	
Irish.....	389	118	59	566	93	18	19	156	7	4	65	10	19	
West Indian.....	6	5	7	18				4			1	2	7	
Bermudian.....	3			3				1			1			
Jamaican.....	2	4		6	1			1						
Greek.....	160	6	8	174	28			123	1	4	8	4	2	
Hebrew, N.E.S.....	46	37	36	119	5			2			36	25	16	
" Russian.....	385	302	315	1,002	33	13	18	19	16	24	303	218	195	
" Polish.....	21	8	6	35				1			20	6	4	
" Austrian.....	14	7	1	22	1			1			12	6	1	
" German.....	3	1		4				1			2	1		
Italian.....	257	13	6	276	42			168	9	5	25			
Newfoundland.....	80	78	18	176	2	1	1	47	2	2	17			
New Zealand.....	2			2	1						1			
Poles, N.E.S.....	8	1		9	1			6				1		
" Austrian.....	2			2							1			
" Russian.....	26	7	8	41	4			6			15	4	8	
Persian.....	24	2	3	29	20	1	2	1			3	1	1	
Roumanian.....	2	5		7	2				1			2		
Russian, N.E.S.....	222	62	58	342	107	24	39	73	8	14	29	13	3	
Finn.....	208	45	9	262	8	1	1	181	6	5	8	3	1	
Spanish.....	1			1										
Swiss.....	14	6		20	4			3	1		6	1		
Servian.....	1			1							1			
Danish.....	27	14	4	45	9	3		6	1	3	7	1		
Swedish.....	96	27	22	145	25	6	9	52	7	8	12	1	1	
Norwegian.....	112	14	13	139	33	3	4	55	7	8	19	1		
Turks.....	40			40	7			32			1			
Armenians.....	80	21	21	122	5	2		59	7	10	11	4	3	
Egyptians.....	2	1	4	7							1			
Syrians.....	57	30	21	108	10	2	2	30	7	11	10	6	1	
Arabians.....	5	2		7				1						
U.S.A. Citizens.....	9	3	3	15				3				1		
Negro.....	48	8	1	57	2			12			30	3		
India.....	1			1										
Totals.....	12,354	3,151	2,687	18,192	3,450	622	738	4,195	286	336	3,201	858	794	

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V.

for Canada at the Port of Halifax for the Fractional Fiscal Year 1906-7
March 31, 1907).

OCCUPATION.										DESTINATION.							
Clerks, Traders, &c.			Miners.			Female Servants.	Not Classified.			Maritime Provinces.	Quebec.	Ontario.	Manitola.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.								
2										1			3				
2	1		2						1	3		2	1	3	3		
3	2	2				1	2			10	12	12	2				
													2				
													2				
													2				
						3	2			8	7	2	15	9			
										3		1					
3	1		12	6	5		2	2		27	22		33		7	2	
												34					
													5				
8							2				10						
5			2	1	1	13	2	3		23	21	59	73	6	4	1	
17	5	7	3			4	13	3		7	75	8	55	32	16	6	
8			2	1	4	9	1	1		23	25	23	138	57	3		
													1				
359	93	66	437	133	212	319	120	129	144	2,034	913	3,949	1,954	516	333	169	
4	1		8			2				11	4	24	11	2	2	3	
155	34	28	85	62	150	158	31	46	25	786	301	1,259	898	109	132	83	
39	9	5	23	8	9	49	13	11	3	135	72	165	133	23	30	8	
1						3				14	1	2	1				
							1			3							
						4				2							
1	1	1							1	13	26	133	1			1	
3	3	9				2		7	11	6	71	28	9	2	3		
22	29	59	1			10	7	16	19	86	551	228	129	1	5	2	
						1		1	2	6	19	7	3				
						1				1	12	8	1				
										1	3						
6	1	1	15			2	1	1		52	125	42	10		4	43	
4			4			35	6	40	15	172	1	3					
													1				
			1								6		3				
			1							1	1						
			1	1		2				3	16	16	6				
											5			24			
						1					2	2	3				
2	1	1	10			15	1	1	1	25	58	56	147	9	2	45	
			11	1	1	33		1	1	13	12	220	2	5	5	5	
												1					
1						3		1		2	4	4	8	1	1		
											1						
5						8		1	1	2	20	2	20		1		
1			6			13			4	16	13	42	36	12	13	13	
2			2			3	1		1	40	2	32	36	12	1	16	
										12	13	15					
2						3	3	5	8	25	68	29					
										6	1						
1	1	4									1						
7	3	3				7		5	4	61	39	4	4				
4	2									1	6						
				1	1		2	1	2	12	1		2				
1						4	3	1	1	49	2	5	1				
													1				
668	187	192	626	214	383	708	214	276	244	3,695	2,541	6,422	3,749	823	565	397	

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PORT OF ST. JOHN.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907) there arrived at the port of St. John 15,990 passengers, of whom 984 travelled saloon and 15,006 steerage. Of the saloon passengers 958 were destined to Canada and 26 to the United States. Of the steerage passengers 13,146 were for Canada and 1,860 for the United States. Included in the steerage passengers for Canada were 1,320 returned Canadians and 185 tourists, leaving the immigration proper at 11,641 souls, an increase over the corresponding nine months of the previous fiscal year of 3,584 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrival of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of St. John for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Australian	3			3	1			1	4			4
Belgian	3			3					3			3
Dutch	1			1					1			1
French	2			2					2			2
German	2			2				1	2			3
English	278	101	22	401	7	1	1	9	285	102	23	410
Welsh	2			2		2		2	2	2		4
Scotch	56	14	1	71	1			1	57	14	1	72
Irish	32	10	2	44	1	1		2	33	11	2	46
West Indian	7	6	4	17					7	6	4	17
Bermudian	26	24	10	65					26	29	10	65
Italian	1			1	1			1	2			2
Japanese	2			2					2			2
U. S. A. Citizens	5	7		12	7	1		8	12	8		20
Canadians	166	84	18	268					166	84	18	268
Tourists	27	26	11	64	1			1	28	26	11	65
Totals ..	613	277	68	958	19	6	1	26	632	283	69	984

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of St. John for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South	3	...	2	5	...	...	...	...	3	...	2	5
Australian	5	4	1	10	2	...	...	2	7	4	1	12
Austrian, N.E.S.	39	11	10	60	25	24	14	63	64	35	24	123
Bohemian	3	2	3	8	2	3	5	10	5	5	8	18
Buckowinian	60	5	9	74	...	...	...	...	60	5	9	74
Croatian	3	...	...	3	...	...	...	...	3	...	...	3
Galician	662	114	64	840	12	4	2	18	674	118	66	858
Hungarian, N.E.S.	135	25	23	183	16	15	9	40	151	40	32	223
Magyar	4	1	...	5	...	...	...	...	4	1	...	5
Slovak	2	...	...	2	...	...	...	...	2	...	...	2
Belgian	85	27	13	125	7	10	12	29	92	37	25	154
Chinese	1	...	...	1	...	...	...	...	1	...	...	1
Dutch	16	4	5	25	2	1	1	4	18	5	6	29
French	19	19	1	39	1	1	...	2	20	20	1	41
German, N.E.S.	44	26	29	99	24	9	11	44	68	35	40	143
Prussian	3	2	2	7	1	1	7	9	4	3	9	16
English	4,383	1,206	982	6,571	166	50	41	257	4,549	1,256	1,023	6,828
Welsh	72	15	8	95	3	...	...	3	75	15	8	98
Scotch	840	198	175	1,213	57	11	5	73	897	209	180	1,286
Irish	291	109	50	450	14	6	2	22	305	115	52	472
West Indian	8	19	1	28	2	...	...	2	10	19	1	30
Bermudian	5	2	...	7	...	...	...	...	5	2	...	7
Jamaican	3	...	...	3	...	...	...	...	3	...	...	3
Greek	14	1	2	17	8	1	...	9	22	2	2	26
Hebrew, N.E.S.	30	36	36	102	...	...	...	...	30	36	36	102
" Russian	175	107	126	408	1	2	3	6	176	109	129	414
" Polish	10	1	2	13	...	...	...	...	10	1	2	13
" Austrian	1	1	...	2	...	...	...	...	1	1	...	2
" German	4	3	3	10	...	...	...	...	4	3	3	10
Italian	303	4	4	311	28	1	1	30	331	5	5	341
Japanese	2	...	...	2	...	...	...	...	2	...	...	2
New Zealand	3	...	...	3	...	...	...	...	3	...	...	3
Poles, N.E.S.	49	9	9	67	3	1	3	7	52	10	12	74
" German .....	...	...	...	...	2	...	...	2	...	...	...	2
" Russian	92	10	8	110	2	1	...	3	94	11	8	113
Roumanian	31	8	4	43	6	2	7	15	37	10	11	58
Russian, N.E.S.	86	35	48	169	148	117	106	371	234	152	154	540
Finns	148	20	2	170	279	68	31	378	427	88	33	548
Swiss	2	...	...	2	4	...	...	4	6	...	...	6
Servian .....	...	...	...	...	1	...	...	1	1	...	...	1
Danish	31	7	13	51	59	18	9	86	90	25	22	137
Swedish	94	26	16	136	73	26	16	115	167	52	32	251
Norwegian	65	20	17	102	125	50	20	195	190	70	37	297
Turks	5	...	...	5	1	1	...	2	6	1	...	7
Syrians	3	4	4	11	...	...	...	...	3	4	4	11
U.S.A. Citizens	3	1	...	4	27	9	9	45	30	10	9	49
Negro	17	28	4	49	1	...	...	1	18	28	4	50
India	1	...	...	1	...	...	...	...	1	...	...	1
Total immigration ...	7,855	2,110	1,676	11,641	1,102	432	314	1,848	8,957	2,542	1,990	13,489
Returned Canadians ..	1,023	195	102	1,320	...	...	...	...	1,023	195	102	1,320
Tourists	124	40	21	185	5	6	1	12	129	46	22	197
Totals	9,002	2,345	1,799	13,146	1,107	438	315	1,860	10,109	2,783	2,114	15,006

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TABLE III.

MONTHLY arrivals of Immigrants for Canada, by Nationalities, at the Port of St. John, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
African, South								2	3	5
Australian								7	3	10
Austrian, N.E.S.					8	8	17	5	22	60
Bohemian						7			1	8
Buckowinian					20	9	3	5	37	74
Croatian						3				3
Galician					60	77	38	64	601	840
Hungarian, N.E.S.					6	35	49	30	63	183
Magyar								4	1	5
Slovak							1	1		2
Belgian					6	12	13	10	84	125
Chinese								1		1
Dutch					1	3		8	13	25
French						1	6	30	2	39
German, N.E.S.					29	30	3	8	29	99
Prussian						7				7
English		4			231	773	441	1,657	3,465	6,571
Welsh					2	21	12	21	39	95
Scotch					10	244	56	348	555	1,213
Irish					8	74	30	126	212	450
West Indian	6	3	6	3	4	6				28
Bermudian	3	4								7
Jamaican		1		2						3
Greek						3			14	17
Hebrew, N.E.S.					51	25	20	2	4	102
Russian					35	129	55	111	78	408
Polish					3	4	2	1	3	13
Austrian						2				2
German						8	1	1		10
Italian		6			7	20	1	31	246	311
Japanese								2		2
New Zealand					1	1	1			3
Poles, N.E.S.					1	5	6	15	40	67
Russian					7	30		24	49	110
Roumanian					8	14		1	20	43
Russian, N.E.S.					9	26	16	30	88	169
Finns					25	56	18	55	16	170
Swiss					2					2
Danish					3	8	4	8	28	51
Swedish					6	19	12	19	80	136
Norwegian					12	16	1	11	62	102
Turks									5	5
Syrians					2	7	2			11
U.S.A. Citizens						1	1	1	1	4
Negro	9	3	12	3	7	6		2	7	49
India				1						1
Totals	18	21	18	9	564	1,690	809	2,641	5,871	11,641

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, at the Port of St. John, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Agriculturists.....	1				132	314	94	397	1,470	2,408
General labourers.....	1	7	4		100	472	201	741	1,970	3,486
Mechanics.....	6	9	4	2	210	544	296	941	1,471	3,483
Clerks.....	2	3	3		31	170	101	251	335	896
Miners.....					18	50	51	124	101	344
Female servants.....	4	1	7	4	38	97	41	78	188	458
Not classed.....	4	1		3	35	43	25	109	336	556
Totals.....	18	21	18	9	564	1,690	809	2,641	5,871	11,641
Maritime Provinces.....	15	18	13	3	39	127	57	253	397	922
Quebec.....	1		1	3	112	415	186	529	685	1,932
Ontario.....	1	2	4	2	188	613	301	860	1,936	3,907
Manitoba.....					115	257	120	562	1,775	2,829
Saskatchewan.....		1			46	82	44	119	444	736
Alberta.....				1	31	99	37	138	369	675
British Columbia.....	1				33	97	64	180	264	639
Yukon.....									1	1
Totals.....	18	21	18	9	564	1,690	809	2,641	5,871	11,641

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for
(9 months, ending

Nationality.	SEX.				TRADE OR								
					Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
African, South	3		2	5				1					1
Australian	5	4	1	10		1	1	2			2		
Austrian, N.E.S.	39	11	10	60	2			24	1		10	4	7
Bohemian	3	2	3	8	1		3	1			1		
Buckowinian	60	5	9	74	6	3	6	49			5	1	3
Croatian	3			3				2			1		
Galician	662	114	64	840	91	17	27	535	26	20	30	11	10
Hungarian, N.E.S.	135	25	23	183	14	5	5	113	8	16	7	2	
Magyar	4	1		5		1		2			1		
Slovak	2			2				1			1		
Belgian	85	27	13	125	20	6	8	25	2		19	3	1
Chinese	1			1									
Dutch	16	4	5	25	3	2	4	2			8	1	1
French	19	19	1	39	3	1		2			6	2	1
German, N.E.S.	44	26	29	99	15	13	19	3			17	4	6
Prussian	3	2	2	7				5	1	2			
English	4,383	1,206	982	6,571	1,030	238	222	1,216	162	200	1,516	360	350
Welsh	72	15	8	95	11	2	2	14			24	5	5
Scotch	840	198	175	1,213	202	36	66	131	10	7	365	46	52
Irish	291	109	50	450	97	15	12	68	10	10	74	24	10
West Indian	8	19	1	28	1			1			2	1	
Bermudian	5	2		7				1			2	1	
Jamaican	3			3							3		
Greek	14	1	2	17				14				1	2
Hebrew, N.E.S.	30	36	36	102		1	5	5	1	1	21	25	23
" Russian	175	107	126	408	6	2	3	29	3	5	124	69	71
" Polish	10	1	2	13				1			9	1	2
" Austrian	1	1		2							1	1	
" German	4	3	3	10							3	3	3
Italian	303	4	4	311	21	1		270	1	1	4		
Japanese	2			2				1					
New Zealand	3			3	1			1			1		
Poles, N.E.S.	49	9	9	67	5	2	4	37	1		6	1	1
" Russian	92	10	8	110	11	1	2	71	5	5	9	1	1
Roumanian	31	8	4	43	2	1	1	24			4	3	2
Russian, N.E.S.	86	35	48	169	17	10	24	50	2	5	14	9	11
Finns	148	20	2	170	5			138	4	1	3		
Swiss	2			2									
Danish	31	7	13	51	13	2	8	9	1	2	7	1	2
Swedish	94	26	15	136	11	1	7	69	8	3	8	1	1
Norwegian	65	26	17	102	18	2	5	35	4	2	8	5	1
Turks	5			5				5					
Syrians	3	4	4	11		1	1	1	1	1			
U. S. A. Citizens	3	1		4									
Negro	17	28	4	49				5	1		9	3	1
India	1			1									
Totals	7,855	2,110	1,676	11,641	1,608	365	435	2,962	252	282	2,326	589	568

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V.

Canada at the Port of St. John for the Fractional Fiscal Year 1906-7
March 31, 1907).

OCCUPATION.									DESTINATION.								
Clerks, Traders, &c.			Miners.			Female Servants.	Not Classified.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.								
1		1					1			1	1	3					
1	3									1	3	1	3			1	1
1	2	1	1	2	2	2	1			3	20	5	10	2	12	1	2
								1									
						1				4	19	11	32	5	2	1	
											3						
4	1		1			48	1	11	7	33	145	114	476	23	37	12	
			1	1		7		2	2	21	9	63	44	36	10		
			1			7						2	2	1			
											1				1		
3	1		17	6	4	5	1	4		21	29	3	34	11	26	1	
1												1					
3								1			6	1	7	1	2	8	
5							3				31		1	2	5		
5			2	1	4	6		2		8	21	16	31	15	6	2	
								1						7			
365	115	109	143	18	33	186	113	127	68	523	663	2,567	1,435	436	417	479	1
7	2		14			3	3	3	1	3	10	36	23	7	12	4	
79	16	4	28	11	21	52	35	27	25	97	304	329	279	74	66	64	
44	6	4	3	3	6	41	5	10	8	30	60	182	103	26	34	15	
3						14	1	4	1	13	1	14					
						1				6				1			
										3							
											3	14					
3	1	4				6	1	2	3	1	57	9	27	8			
15	17	42	1	1		8		7	5	35	219	99	47	3		5	
											6	7					
											2						
1											3		7				
2	1		6		1			1	2	41	143	109	13			5	
1										2							
			1			2		3	4	1	19	10	36		1		
1						2		1		11	34	41	23		1		
1						4				2	32	2	2	5			
1						9	1	5	8	7	49	21	56	35		1	
			1			14	2	1	1	5	9	136	3	4	8	5	
														2			
1			1			2		1	1	3	9	3	15	1	19	1	
			6			13		3	5	10	3	57	32	20	5	9	
4						9			9	4	5	28	36	11	8	10	
											1	4					
2	2	2								2	8	1					
1	1						1			1		2	1				
3						23		1	3	30	4	14				1	
						1									1		
561	168	167	229	44	71	458	169	234	153	922	1,932	3,907	2,829	736	675	639	1

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PORT OF QUEBEC.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907), there arrived at the Port of Quebec 62,517 passengers, of whom 4,868 travelled saloon and 57,649 steerage. Of the saloon passengers 4,247 were destined to Canada and 621 to the United States. Of the steerage passengers 47,271 were for Canada and 10,378 for the United States. Included in the steerage passengers for Canada were 4,472 returned Canadians and 1,262 tourists, leaving the immigration proper at 41,537 souls, an increase over the corresponding nine months of the previous fiscal year of 12,464 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of Quebec, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Australian	6	5		11	1			1	3	5		12
Austrian	3			3					3			3
Belgian	7	1	3	11					7	1	3	11
Dutch	1			1					1			1
French	33	13	1	47	1	1		2	34	14	1	49
German	18	11		29					18	11		29
English	1,028	687	62	1,777	50	40	9	99	1,078	727	71	1,876
Welsh	7	5		12					7	5		12
Scotch	256	132	16	404	12	8	2	22	268	140	18	426
Irish	73	34	2	109	5	2		7	78	36	2	116
Hebrew	1			1					1			1
Italian	4	1		5	2			2	6	1		7
Japanese	1	1		2					1	1		2
Newfoundland	2			2					2			2
New Zealand	2	4		6					2	4		6
Roumanian		1		1						1		1
Russian	3	2		5					3	2		5
Finns		1		1						1		1
Spanish	1	1		2					1	1		2
Swiss	1			1					1			1
Danish	1		1	2					1		1	2
Swedish	1			1	1	2		3	2	2		4
Norwegian		2		2					1	2		3
U.S.A. Citizens	20	29	6	55	197	245	32	474	217	274	38	529
India	1	2		3					1	2		3
Canadians	646	703	81	1,430	2	3	1	6	648	706	82	1,436
Tourists	193	122	9	324	2	2		4	195	124	9	328
Totals	2,309	1,757	181	4,247	274	303	44	621	2,583	2,060	225	4,868

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TABLE II.

NATIONALITY and sex of Steerage Passengers arriving at the Port of Quebec for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South.	7	1	1	9					7	1	1	9
Australian.	26	7	3	36	4	1	3	8	30	8	6	44
Austrian, N.E.S.	61	29	31	121	64	30	18	112	125	59	49	233
Bohemian.	14	22	20	56	5	5		10	19	27	20	66
Buckowinian.	85	23	44	152					85	23	44	152
Croatian.	13	3	4	20	44			44	57	3	4	64
Dalmatian.					1			1				1
Galician.	352	193	213	758	29	18	8	55	381	211	221	813
Hungarian, N.E.S.	75	30	27	132	37	26	30	93	112	56	57	225
Slovak.	2			2					2			2
Belgian.	170	104	89	363	64	21	13	98	234	125	102	461
Bulgarian.	23			23	40		1	41	63		1	64
Chinese.	3			3					3			3
Dutch.	59	40	37	136	19	17	24	60	78	57	61	196
French.	407	212	178	797	38	19	13	70	445	231	191	867
German, N.E.S.	354	216	254	824	152	171	183	506	506	387	437	1,330
Alsace-Lorraine.	1			1					1			1
Prussian.	2	1		3	2	2	3	7	4	3	3	10
English.	10,308	6,124	5,759	22,191	650	416	276	1,342	10,958	6,540	6,035	23,533
Welsh.	186	78	63	327	23	8	3	34	209	86	66	361
Scotch.	2,787	1,653	1,162	5,602	257	108	69	434	3,044	1,761	1,231	6,036
Irish.	1,156	723	290	2,169	102	77	44	223	1,258	800	334	2,392
West Indian.	4			4					4			4
Jamaican.	3			3					3			3
Greek.	99	8	12	119	24			24	123	8	12	143
Hebrew, N.E.S.	91	89	67	247	16	15	9	40	107	104	76	287
" Russian.	1,314	905	1,118	3,337	67	80	79	226	1,381	985	1,197	3,563
" Polish.	1			1					1			1
" Austrian.	29	14	21	64					29	14	21	64
" German.	9	7	11	27	1			1	10	7	11	28
Italian.	510	21	15	546	65	10	6	81	575	31	21	627
Japanese.	1			1	4	2		6	5	2		7
Newfoundland.	1	1		2					1	1		2
New Zealand.	10	3		13					10	3		13
Portuguese.	2			2					2			2
Poles, N.E.S.	39	8	7	54	31	14	16	61	70	22	23	115
" Austrian.	14	5	14	33					14	5	14	33
" German.	2	1		3	1	1	1	3	3	2	1	6
" Russian.	144	43	51	238	28	16	12	56	172	59	63	294
Persian.	1			1					1			1
Roumanian.	49	48	56	153	2	5	2	9	51	53	58	162
Russian, N.E.S.	360	205	251	816	693	480	499	1,672	1,053	685	750	2,488
Finns.	372	127	55	554	704	331	172	1,207	1,076	458	227	1,761
Spanish.	12	2		14	5	3	2	10	17	5	2	24
Swiss.	36	18	15	69	7	5	1	13	43	23	16	82
Servian.	2			2	1	1		2	3	1		4
Danish.	66	57	30	153	74	62	46	182	140	119	76	335
Icelandic.	17	12	17	46	1	1	2	4	18	13	19	50
Swedish.	329	168	168	665	471	334	214	1,019	800	502	382	1,684
Norwegian.	220	163	114	497	698	461	307	1,466	918	624	421	1,963
Turks.	3			3	4			4	7			7
Armenians.	7	2	2	11					7	2	2	11
Egyptians.	2	1		3					2	1		3
Syrians.	11	16	23	50	1			1	12	16	23	51
Arabians.	13	8	3	24					13	8	3	24
U. S. A. Citizens.	21	10	14	45	459	567	102	1,128	480	577	116	1,173
India.	8	2	2	12	1			1	9	2	2	13
Total immigration.	19,893	11,403	10,241	41,537	4,889	3,307	2,158	10,354	24,782	14,710	12,899	51,891
Returned Canadians.	2,370	1,634	468	4,472					2,370	1,634	468	4,472
Tourists.	727	484	51	1,262	11	11	2	24	738	495	53	1,286
Totals.	22,990	13,521	10,760	47,271	4,900	3,318	2,160	10,378	27,890	16,839	12,920	57,649

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TABLE III.

MONTHLY arrivals of Immigrants for Canada by Nationalities at the Port of Quebec for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907)

Nationalities.	July.	August.	Sept.	Oct.	Nov.	Totals.
African, South	3	4	1	1	.....	9
Australian	16	1	4	9	6	36
Austrian, N. E. S.	27	21	24	20	29	121
Bohemian	3	17	20	8	8	56
Buckowinian	72	38	24	4	14	152
Croatian	3	.....	3	.....	14	20
Galician	384	97	148	33	96	758
Hungarian, N. E. S.	15	13	19	40	45	132
Slovak .....	.....	.....	2	.....	.....	2
Belgian	106	71	81	55	50	363
Bulgarian	6	1	12	1	3	23
Chinese .....	.....	1	2	.....	.....	3
Dutch	38	39	28	18	13	136
French	334	106	114	166	77	797
German, N. E. S.	198	128	132	257	109	824
Alsace-Lorraine	1	.....	.....	.....	.....	1
Prussian .....	.....	1	1	1	.....	3
English	6,119	6,359	4,352	3,748	1,613	22,191
Welsh	56	102	71	59	39	327
Scotch	1,568	1,187	1,193	1,041	613	5,602
Irish	522	641	434	390	182	2,169
West Indian	2	1	1	.....	.....	4
Jamaican	1	.....	2	.....	.....	3
Greek	25	20	8	52	14	119
Hebrew, N.E.S.	51	56	84	12	44	247
" Russian	849	878	930	412	268	3,337
" Polish .....	.....	.....	.....	1	.....	1
" Austrian	7	10	26	4	17	64
" German .....	.....	7	1	16	3	27
Italian	185	79	87	92	103	546
Japanese	1	.....	.....	.....	.....	1
Newfoundland .....	.....	1	.....	.....	1	2
New Zealand	2	7	3	.....	1	13
Portuguese .....	.....	1	.....	1	.....	2
Poles, N.E.S.	14	19	7	11	3	54
" Austrian	2	21	8	2	.....	33
" German .....	.....	2	.....	1	.....	3
" Russian	104	60	23	26	25	238
Persian	1	.....	.....	.....	.....	1
Roumanian	44	14	19	16	60	153
Russian, N.E.S.	113	121	215	144	223	816
Finns	85	117	130	148	74	554
Spanish .....	.....	.....	12	2	.....	14
Swiss	25	11	22	6	5	69
Servian	1	.....	1	.....	.....	2
Danish	37	53	27	29	7	153
Icelandic	35	1	10	.....	.....	46
Swedish	220	138	139	107	61	665
Norwegian	143	133	101	93	27	497
Turks	3	.....	.....	.....	.....	3
Armenians	2	1	4	4	.....	11
Egyptians .....	.....	.....	1	1	1	3
Syrians	6	4	20	3	17	50
Arabians	5	.....	.....	2	17	24
U.S.A. Citizens	19	12	7	4	3	45
India	9	2	1	12
Totals	11,462	10,596	8,553	7,041	3,885	41,537

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, at the Port of Quebec, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

—	July.	August.	September.	October.	November.	Totals.
Agriculturists.....	2,385	2,717	1,701	1,435	642	8,880
General labourers.....	2,985	1,844	1,498	1,295	1,077	8,702
Mechanics.....	3,902	3,483	3,103	2,442	1,262	14,192
Clerks.....	811	829	763	661	382	3,446
Miners.....	264	243	301	269	68	1,145
Female servants.....	727	601	632	498	287	2,745
Not classed.....	385	879	555	441	167	2,427
Totals.....	11,462	10,596	8,553	7,041	3,885	41,537
Maritime Provinces.....	129	146	176	133	69	653
Quebec.....	2,648	2,246	2,521	1,736	1,378	10,529
Ontario.....	4,378	3,887	3,201	2,886	1,434	15,786
Manitoba.....	2,787	3,077	1,377	1,094	534	8,869
Saskatchewan.....	665	474	455	408	196	2,198
Alberta.....	457	420	411	387	135	1,810
British Columbia.....	397	346	410	397	139	1,689
Yukon.....	1	2	3
Totals.....	11,462	10,596	8,553	7,041	3,885	41,537

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for Canada at the

Nationality.	SEX.				TRADE OR								
					Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
African, South	7	1	1	9	1	1	1	2	1	1	1	1	1
Australian	26	7	3	36	2	1	1	1	1	1	8	1	1
Austrian, N.E.S.	61	29	31	121	9	5	8	25	8	13	18	6	5
Bohemian	14	22	20	56	1	3	6	6	2	1	1	3	1
Buckowinian	85	23	44	152	21	6	14	56	10	18	6	3	12
Croatian	13	3	4	20	4	3	4	9	1	1	1	1	1
Galician	352	193	213	758	93	55	97	225	65	105	30	10	4
Hungarian, N.E.S.	75	30	27	132	12	7	9	42	14	16	17	1	1
Slovak	2	1	1	4	2	1	1	1	1	1	1	1	1
Belgian	170	104	89	363	67	36	58	32	6	3	33	30	20
Bulgarian	23	1	1	25	10	1	1	12	1	1	1	1	1
Chinese	3	1	1	5	1	1	1	3	1	1	1	1	1
Dutch	59	40	37	136	20	12	20	11	6	6	21	15	8
French	407	212	178	797	215	73	91	24	7	11	76	50	41
German, N.E.S.	354	216	254	824	153	81	161	86	19	31	103	43	35
Alsace-Lorraine	1	1	1	3	1	1	1	1	1	1	1	1	1
Prussian	2	1	1	4	1	1	1	1	1	1	1	1	1
English	10,308	6,124	5,759	22,191	2,850	904	1,006	2,074	837	1,157	3,670	2,026	2,168
Welsh	186	78	63	327	58	13	14	42	16	20	37	14	9
Scotch	2,787	1,653	1,162	5,602	699	188	225	470	121	157	1,107	537	532
Irish	1,156	723	290	2,169	372	72	70	292	59	63	242	154	107
West Indian	4	1	1	6	1	1	1	1	1	1	1	1	1
Jamaican	3	1	1	5	1	1	1	1	1	1	1	1	1
Greek	99	8	12	119	7	2	1	76	1	2	7	3	5
Hebrew, N.E.S.	91	89	67	247	9	6	9	30	9	3	48	48	44
" Russian	1,314	905	1,118	3,337	76	46	80	291	112	183	868	497	691
" Polish	1	1	1	3	1	1	1	1	1	1	1	1	1
" Austrian	29	14	21	64	5	2	8	8	1	2	16	10	11
" German	9	7	11	27	3	1	4	1	1	1	5	5	7
Italian	510	21	15	546	9	1	1	431	11	12	34	1	1
Japanese	1	1	1	3	1	1	1	1	1	1	1	1	1
Newfoundland	1	1	1	3	1	1	1	1	1	1	1	1	1
New Zealand	10	3	1	14	2	1	1	1	1	1	4	1	1
Portuguese	2	1	1	4	1	1	1	1	1	1	1	1	1
Poles, N.E.S.	39	8	7	54	3	1	1	24	3	4	11	3	3
" Austrian	14	5	14	33	4	1	6	7	1	5	3	1	3
" German	2	1	1	4	1	1	1	1	1	1	1	1	1
" Russian	144	43	51	238	8	1	1	72	14	26	53	16	17
Persian	1	1	1	3	1	1	1	1	1	1	1	1	1
Roumanian	49	48	56	153	3	4	4	28	9	16	16	21	27
Russian, N.E.S.	360	205	251	816	81	38	91	159	49	61	95	51	48
Finn	372	127	55	554	58	3	2	276	33	47	16	6	5
Spanish	12	2	1	15	12	1	1	1	1	1	1	1	1
Swiss	36	18	15	69	9	5	13	11	1	1	11	5	2
Servian	2	1	1	4	1	1	1	1	1	1	1	1	1
Danish	66	57	30	153	20	12	15	18	4	3	24	8	8
Icelandic	17	12	17	46	5	5	10	8	1	1	2	1	1
Swedish	329	168	168	665	99	28	62	164	35	57	47	21	40
Norwegian	220	163	114	497	75	33	47	101	27	33	35	20	29
Turks	3	1	1	5	1	1	1	1	1	1	1	1	1
Armenians	7	2	2	11	1	1	1	4	1	1	2	1	1
Egyptians	2	1	1	4	1	1	1	1	1	1	1	1	1
Syrians	11	16	23	50	3	6	10	6	2	1	3	3	3
Arabians	13	8	3	24	1	1	1	8	3	1	1	1	2
U.S.A. Citizens	21	10	14	45	6	4	7	2	1	5	5	4	1
India	8	2	2	12	2	1	1	3	1	1	1	1	1
Totals	19,893	11,403	10,241	41,537	5,071	1,657	2,152	5,146	1,488	2,068	6,679	3,623	3,890

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V.

Port of Quebec for the Fractional Fiscal Year 1906-7 (9 months' ending March 31, 1907).

OCCUPATION.										DESTINATION.							
Clerks, Traders, &c.			Miners.			Female Servants.	Not Classified.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.								
2							1				3	3	3				
10	2						5	3	3	2	13	13	5			3	
4			2			9	3	1	5	3	48	10	23	26	3	8	
				9	12		1				3	3	5	9	9	20	
			2			4				3	28	25	45	48	3		
											9	3	8				
1	1	3	4	3	3	55	1	4	1	11	125	79	420	52	67	4	
			2			8		1	2	5	20	19	27	61			
21	6	1	8			24	9	2	7	1	156	10	121	16	45	14	
1											3	19	1				
5	1					3	2	3	3		27	18	64	12	12	3	
44	16	13	4	1	2	28	44	37	20	16	316	66	269	76	42	12	
18	8	4	4	4	13	50	10	11	10	4	144	64	389	98	119	6	
													1				
											1			2			
1,069	545	359	302	140	190	1,227	343	445	879	234	4,374	10,120	4,544	1,069	847	1,003	
18	6	5	23	5	9	16	8	8	6		55	138	86	7	12	29	
322	147	97	126	44	92	509	63	107	59	179	1,343	2,026	1,134	292	295	332	1
196	72	31	10	2	5	295	44	69	14	20	538	887	521	71	65	67	
							1				4						
3											3						
5	1					1	4		5		50	67	1			1	
3	4	4				21	1	1	1	3	149	36	37	13	9		
56	73	114	12	4	3	145	11	28	47	78	1,777	907	501	20	34	20	
											1						
							1			10	35	14	4	1			
13	2	1	18			3	5	4	2	13	111	1	15		23	14	
												1					
												2					
2	1		1			1					2	5	5			1	
											1						
			1			2					36	17	1				
						2					6	2	2	12	11		
			2								1						
6	3	6	4			8	1	1	1	2	122	78	26		5	1	
1											1						
2	3	4				10		1	5	1	97	23	19	13	25	24	
15	1	20	6	1	3	41	4	11	19	16	299	130	190	130	21	31	2
			20	1	1	83	2	1		5	43	441	7	6	21	31	
								1			3		11				
3						3	2	4			26	18	12	1	12		
											1		1				
3	1		1	1	3	30		1	1		57	27	32	10	21	6	
1						6	1		5		2		42		2		
3	3	3	12	4	4	74	4	3	2	33	64	224	175	52	72	45	
4			5	6	4	77			1	1	59	162	113	69	51	42	
							3				3						
1	1	2									7						
	1						1				2		1				
1	3	8				1	1	1	1		32	2		16			
4	1	1				3					21	3					
4			1			1	3		1		14	9	2	14	5	1	
2	1	2									5	5				2	
1,843	916	687	576	225	344	2,743	578	749	1,100	653	10,529	15,786	8,869	2,198	1,810	1,689	3

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PORT OF VANCOUVER.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907), there arrived at the Port of Vancouver 6,092 passengers, of whom 932 travelled saloon and 5,160 steerage. Of the saloon passengers 657 were destined to Canada and 275 to the United States. Of the steerage passengers 3,981 were for Canada and 1,179 for the United States. Included in the steerage passengers for Canada were 987 returned Canadians and 712 tourists, leaving the immigration proper at 2,282 souls, an increase over the corresponding nine months of the previous fiscal year of 1,260 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of Vancouver for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Australian	20	21	4	45	9	10	.....	19	29	31	4	64
Austrian	3	1	.....	4	.....	.....	.....	.....	3	1	.....	4
Belgian	4	.....	.....	4	.....	.....	.....	.....	4	.....	.....	4
Chinese	5	7	.....	12	1	.....	.....	1	6	7	.....	13
Dutch .....	.....	1	.....	1	1	.....	.....	1	1	1	.....	2
French	11	.....	.....	11	.....	1	.....	1	11	1	.....	12
German	23	4	.....	27	4	1	.....	5	27	5	.....	32
English	218	105	20	343	13	7	7	27	231	112	27	370
Scotch	29	14	.....	43	3	1	.....	4	32	15	.....	47
Irish	3	1	.....	4	.....	.....	.....	.....	3	1	.....	4
Greek .....	.....	.....	.....	.....	1	.....	.....	1	1	.....	.....	1
Japanese	22	1	.....	23	16	1	.....	17	38	2	.....	40
New Zealand	7	2	.....	9	5	2	.....	7	12	4	.....	16
Portuguese	5	1	.....	6	.....	.....	.....	.....	5	1	.....	6
Polish	2	.....	.....	2	.....	.....	.....	.....	2	.....	.....	2
Philippino .....	.....	.....	.....	.....	3	.....	.....	3	3	.....	.....	3
Russian	6	1	3	10	2	2	.....	4	8	3	3	14
Swiss	2	1	.....	3	.....	.....	.....	.....	2	1	.....	3
Danish	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1
Norwegian	1	.....	.....	1	.....	.....	.....	.....	1	.....	.....	1
U. S. A. Citizens	18	11	1	30	100	63	17	180	118	74	18	210
Canadians	27	29	1	57	3	1	4	30	30	1	61
Tourists	8	13	21	1	1	9	13	22
Totals	415	213	29	657	162	89	24	275	577	302	53	932

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Vancouver for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Australian.....	36	28	49	113	16	10	2	28	52	38	51	141
Austrian.....					1			1	1			1
Chinese.....	33	7	14	54	12			12	45	7	14	66
French.....					1	1		2	1	1		2
German.....	1	2		3	3			3	4	2		6
English.....	46	18	5	69	17	4	3	24	63	22	8	93
Welsh.....	2			2					2			2
Scotch.....	14	3		17	3			3	17	3		20
Irish.....	10	8	1	19	2	1		3	12	9	1	22
West Indian.....					1			1	1			1
Greek.....					1			1	1			1
Hebrew.....					1			1	1			1
Italian.....					1			1	1			1
Japanese.....	321	48	4	373	113	30	10	153	434	78	14	526
New Zealand.....	6	2		8	4			4	10	2		12
Portuguese.....					2			2	2			2
Roumanian.....						3	3	6		3	3	6
Russian, N.E.S.....	3			3	7	1		8	10	1		11
Finns.....					1			1	1			1
Swedish.....					3			3	3			3
Norwegian.....		2	1	3						2	1	3
Armenians.....	4			4					4			4
U.S.A. Citizens.....	2	2	2	6	43	32	7	82	45	34	9	88
India.....	1,608			1,608	1			1	1,609			1,609
Total Immigration.....	2,086	120	76	2,282	233	82	25	340	2,319	202	101	2,622
Returned Canadians ..	945	22	20	987					945	22	20	987
Tourists.....	608	64	40	712	772	35	32	839	1,380	99	72	1,551
Totals.....	3,639	206	136	3,981	1,005	117	57	1,179	4,644	323	193	5,160

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TABLE III.

MONTHLY arrivals of Immigrants for Canada, by Nationalities, at the Port of Vancouver, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Australian.....	28	32	8	2	2	1	7	17	16	113
Chinese.....	1	11	3	6	11	.....	4	15	3	54
German.....	.....	1	.....	.....	.....	.....	.....	.....	2	3
English.....	8	26	.....	5	7	1	1	11	10	69
Welsh.....	.....	.....	.....	.....	1	.....	.....	1	.....	2
Scotch.....	.....	14	.....	1	.....	.....	.....	1	1	17
Irish.....	1	.....	.....	3	.....	.....	2	7	6	19
Japanese.....	163	80	4	5	3	2	1	49	66	373
New Zealand.....	3	1	1	1	.....	.....	.....	2	..	8
Russian, N.E.S.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3
Norwegian.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3
Armenians.....	.....	4	.....	.....	.....	.....	.....	.....	.....	4
U.S.A. Citizens.....	1	3	.....	2	.....	.....	.....	.....	.....	6
India.....	191	546	238	218	328	33	10	44	1,608
Totals.....	396	724	254	243	352	37	15	113	148	2,282

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, at the Port of Vancouver, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Agriculturists	34	276	2	3	.....	.....	.....	24	17	356
General labourers	197	319	241	219	334	33	1	14	41	1,399
Mechanics	9	21	1	2	1	1	.....	11	9	55
Clerks	48	20	5	9	14	2	4	30	51	183
Miners	3	6	.....	.....	2	.....	8	3	7	29
Female servants	14	.....	1	3	.....	.....	.....	.....	2	20
Not classed	91	82	4	7	1	1	2	31	21	240
Totals	396	724	254	243	352	37	15	113	148	2,282
Maritime Provinces .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Quebec .....	.....	.....	.....	.....	.....	.....	.....	1	2	3
Ontario .....	.....	3	.....	9	.....	.....	1	3	.....	16
Manitoba	2	6	.....	2	2	.....	.....	.....	.....	12
Saskatchewan .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alberta	1	.....	1	1	.....	1	.....	2	.....	6
British Columbia	393	715	253	231	350	36	14	107	146	2,245
Yukon
Totals	396	724	254	243	352	37	15	113	148	2,282

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant Arrivals for
ending March

Nationality.	SEX.				TRADE OR								
					Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
Australian	36	28	49	113	7	.....	3	8	.....	.....	6	4	4
Chinese	33	7	14	54	1	.....	.....	2	.....	.....	.....	.....	.....
German	1	2	.....	3	.....	.....	.....	.....	.....	.....	1	.....	.....
English	46	18	5	69	7	2	1	6	.....	.....	12	3	3
Welsh	2	.....	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....
Scotch	14	3	.....	17	2	1	.....	1	.....	.....	6	.....	.....
Irish	10	8	1	19	1	.....	.....	1	1	1	1	.....	.....
Japanese	321	48	4	373	90	10	.....	33	.....	.....	10	1	.....
New Zealand	6	2	.....	8	1	1	.....	.....	.....	.....	3	.....	.....
Russian, N.E.S.. .	3	.....	.....	3	3	.....	.....	.....	.....	.....	.....	.....	.....
Norwegian . . . . .	.....	2	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....
Armenians	4	.....	.....	4	4	.....	.....	.....	.....	.....	.....	.....	.....
U.S.A. Citizens. .	2	2	2	6	1	1
India	* 1,608	1,608	222	1,344
Totals	2,086	120	76	2,282	338	14	4	1,397	1	1	40	8	7

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V.

Canada at the Port of Vancouver for the Fractional Fiscal Year 1906-7 (9 months, 31, 1907).

OCCUPATION.										DESTINATION.							
Clerks, Traders, &c.			Miners.			Not Classified.			Female Servants.	Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.									
10	4	8	3	4	6	2	2	14	28			1	2		3	107	
26	4	10					4	3	4		1	6	1			46	
							2	2			2					1	
12	3	1	5			1	4	9				3	7		1	58	
			1													2	
			5					2				1	1			15	
2	1		3	2		3	2	1				3				16	
82	9					14	106	14	4							373	
2								1					1		2	5	
								2	1							3	
																3	
								2	2			2				4	
9							33									1,608	
143	21	19	17	6	6	20	151	50	39		3	16	12		6	2,245	

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PORT OF VICTORIA.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907), there arrived at the Port of Victoria 4,727 passengers, of whom 144 travelled saloon and 4,583 steerage. Of the saloon passengers 82 were destined to Canada and 62 to the United States. Of the steerage passengers 2,912 were for Canada and 1,671 for the United States. Included in the steerage passengers for Canada were 595 returned Canadians and 24 tourists, leaving the immigration proper at 2,293 souls, an increase over the corresponding nine months of the previous fiscal year of 2,025 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants for Canada, and Tables IV. and V. give summaries of the information obtained from immigrants for Canada upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers arriving at the Port of Victoria for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
Australian.....	2	2	2	6	1	..	1	2	3	2	3	8
Chinese.....	1	2	..	3	..	..	..	..	1	2	..	3
German	1	1	..	2	..	..	..	..	1	1	..	2
English.....	17	16	4	37	4	..	..	4	21	16	4	41
Scotch.....	2	1	..	3	1	..	..	1	3	1	..	4
Irish.....	2	1	..	3	..	..	..	..	2	1	..	3
Japanese.....	4	..	..	4	9	3	..	12	13	3	..	16
New Zealand.....	1	..	..	1	..	..	..	..	1	..	..	1
Russian	4	..	..	4	..	..	..	..	4	..	..	4
U. S. A. Citizens.....	..	..	..	..	26	16	..	42	26	16	..	42
India.....	..	..	..	..	1	..	..	1	1	..	..	1
Canadians	4	2	1	7	4	2	1	7
Tourists.....	8	4	..	12	8	4	..	12
Totals.....	46	29	7	82	42	19	1	62	88	48	8	144

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TABLE II.

NATIONALITY and Sex of Steerage Passengers arriving at the Port of Victoria for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.				UNITED STATES.				CANADA AND UNITED STATES.			
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Totals.
African, South.....					1		5	6	1		5	6
Australian.....	3	2	2	7	64	20	28	112	67	22	30	119
Austrian.....	4	1		5	17	1	3	21	21	2	3	26
Bulgarian.....	1			1					1			1
Chinese.....	14	2	6	22					14	2	6	22
French.....					1	1	1	3	1	1	1	3
German.....	1			1	7	2		9	8	2		10
English.....	11	4	2	17	76	24	4	104	87	28	6	121
Welsh.....					3			3	3			3
Scotch.....	3	1		4	57	3		60	60	4		64
Irish.....	2			2	25	3		28	27	3		30
Greek.....	3			3	2			2	5			5
Italian.....	5			5	14	1		15	19	1		20
Japanese.....	1,442	194	30	1,666	885	88	17	990	2,327	282	47	2,656
New Zealand.....	2	2		4	20	6	4	30	22	8	4	34
Russian, N.E.S.....	40	1	2	43	7			7	47	1	2	50
Finns.....					1			1	1			1
Spanish.....	1			1					1			1
Swiss.....	1			1	2			2	3			3
Danish.....					2			2	2			2
Swedish.....					1		1	2	1		1	2
Norwegian.....	1			1	3	4	1	8	4	4	1	9
Turks.....	3			3					3			3
Syrians.....					2	1		3	2	1		3
U.S.A. Citizens.....	5			5	82	23	19	124	87	23	19	129
India.....	502			502	6			6	508			508
Total Immigration...	2,044	267	42	2,293	1,278	177	83	1,538	3,322	384	125	3,831
Returned Canadians...	573	12	10	595					573	12	10	595
Tourists.....	19	3	2	24	97	23	13	133	116	26	15	157
Totals	2,636	222	54	2,912	1,375	200	96	1,671	4,011	422	150	4,583

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TABLE III.

MONTHLY arrivals of Immigrants for Canada, by Nationalities, at the Port of Victoria, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	Aug.	Sept	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Australian	1						1		5	7
Austrian		2	3							5
Bulgarian				1						1
Chinese		3	1	5	4	2	2	5		22
German				1						1
English	5		6			2		2	2	17
Scotch	2		1				1			4
Irish	1					1				2
Greek			1	1			1			3
Italian							5			5
Japanese	180	177	155	286	210	173	164	132	189	1,666
New Zealand	2			2						4
Russian, N.E.S.		9	13	3		9	3	2	4	43
Spanish		1								1
Swiss									1	1
Norwegian	1									1
Turks		1	1			1				3
U.S.A. Citizens	3			1		1				5
India	3	40	27	22	383		21		6	502
Totals	198	233	208	322	597	189	198	141	207	2,293

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, at the Port of Victoria, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
Agriculturists.....	30	57	41	105	56	22	51	38	28	428
General labourers.....	41	43	51	43	388	44	38	10	54	712
Mechanics.....	15	14	5	9	4	15	6	1	2	71
Clerks ..	42	63	67	77	63	39	26	43	58	478
Miners.....	1			1		6				8
Female servants.....	2	7			1			2		12
Not classed.....	67	49	44	87	85	63	77	47	65	584
Totals.....	198	233	208	322	597	189	198	141	207	2,293
Maritime Provinces										
Quebec										
Ontario.....			2							2
Manitoba.....										
Saskatchewan.....										
Alberta.....			1							1
British Columbia.....	198	233	205	322	597	189	198	141	207	2,290
Yukon.....										
Totals.....	198	233	208	322	597	189	198	141	207	2,293

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for Canada at
March

Nationality.	SEX.				TRADE OR								
					Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
	Males.	Females.	Children.	Totals.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
Australian	3	2	2	7	.....	.....	.....	.....	.....	.....	1	.....	.....
Austrian	4	1	.....	5	.....	.....	.....	3	.....	.....	.....	.....	.....
Bulgarian	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chinese	14	2	6	22	2	.....	.....	2	.....	.....	.....	.....	.....
German	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
English	11	4	2	17	1	.....	.....	2	.....	.....	5	1	1
Scotch	3	1	.....	4	.....	.....	.....	1	.....	.....	1	.....	.....
Irish	2	.....	.....	2	.....	.....	.....	.....	.....	.....	1	.....	.....
Greek	3	.....	.....	3	.....	.....	.....	.....	.....	.....	2	.....	.....
Italian	5	.....	.....	5	.....	.....	.....	4	.....	.....	.....	.....	.....
Japanese	1,442	194	30	1,666	353	21	2	207	15	6	36	4	.....
New Zealand	2	2	.....	4	.....	.....	.....	1	.....	.....	.....	.....	.....
Russian	40	1	2	43	15	.....	.....	5	.....	.....	13	.....	2
Spanish	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Swiss	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Norwegian	1	.....	.....	1	.....	.....	.....	.....	.....	.....	1	.....	.....
Turks	3	.....	.....	3	1	.....	.....	.....	.....	.....	2	.....	.....
U.S.A. Citizens	5	5	1	2
India	502	502	32	464
Totals,	2,044	207	42	2,293	405	21	2	691	15	6	63	5	3

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V.

the Port of Victoria, for the Fractional Fiscal Year 1906-7 (9 months, ending 31, 1907).

OCCUPATION.										DESTINATION.							
Clerks, Traders, &c.			Miners.			Female servants.	Not classed.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.		Males.	Females.	Children.								
1	1	1	.....	.....	.....	.....	1	1	1	.....	.....	.....	.....	.....	.....	7	...
1	.....	.....	.....	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	.....	5	.....
6	1	2	.....	.....	.....	.....	4	1	4	.....	.....	.....	.....	.....	.....	22	.....
3	2	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	.....
1	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	17	.....
1	1	1	4
1	2
409	37	4	5	9	1	3
2	1	1	5
1	1,665
.....	4
.....	42
.....	1
1	1	1	1
3	2
.....	5
.....	502
429	41	8	8	12	448	113	23	2	1	2,290

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UNITED STATES PORTS.

For the fractional fiscal year 1906-7 (9 months, ending March 31, 1907), there arrived in Canada, via ports in the United States 13,459 passengers, of whom 248 travelled saloon and 13,211 steerage. Included in the steerage passengers were 142 returned Canadians and 18 tourists, leaving the immigration proper at 13,051 souls, an increase over the corresponding nine months of the previous fiscal year of 6,739 persons.

Table I. deals with the total arrivals of saloon passengers, Table II. with the total arrivals of steerage passengers, Table III. with the monthly arrivals of immigrants, and Tables IV. and V. give summaries of the information obtained from immigrants upon arrival.

TABLE I.

NATIONALITY and Sex of Saloon Passengers for Canada via Ports in the United States for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.			
	Males.	Females.	Children.	Totals.
German.....		1		1
English.....	52	25	2	79
Scotch.....	5	1		6
Irish.....		4	1	5
Jamaican.....	2			2
Swiss.....		1		1
Canadians.....	77	69	8	154
Totals.....	136	101	11	248

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TABLE II.

NATIONALITY and Sex of Steerage Passengers, for Canada, via Ports in the United States, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	CANADA.			
	Males.	Females.	Children.	Totals.
African, South	1	2	2	5
Australian	4	2	1	7
Austrian, N.E.S.	293	37	9	339
Bohemian	15	9	6	30
Buckowinian	1			1
Croatian	134	8	4	146
Dalmatian	44			44
Galician	3	4	6	13
Hungarian, N.E.S.	138	20	22	180
Magyar	241	57	44	342
Ruthenian	248	33	22	303
Slovak	116	14	12	142
Belgian	49	16	6	71
Bulgarian	121			121
Dutch	32	9	5	46
French	148	86	40	274
German, N.E.S.	284	185	220	689
Prussian	1	1		2
English	1,290	488	652	2,430
Welsh	14	4	1	19
Scotch	206	93	25	324
Irish	110	72	13	195
West Indian	8	3	3	14
Jamaican	1	3		4
Greek	212	7	12	231
Hebrew, N.E.S.	45	17	14	76
" Russian	364	327	364	1,055
" Austrian	23	18	17	58
" German	2			2
Italian	3,355	346	275	3,976
Poles, N.E.S.	10	3	1	14
" Austrian	254	51	35	340
" German	10	2	7	19
" Russian	83	12	3	103
Roumanian	177	23	28	228
Russian, N.E.S.	284	116	136	536
Finn	46	13	4	63
Spanish	7	2	4	13
Swiss	15	4	1	20
Servian	1			1
Danish	24	14	9	47
Swedish	81	37	13	131
Norwegian	84	28	20	132
Turks	155	15	8	178
Armenians	32	1		33
Syrians	28	15	6	49
U.S.A. Citizens.	3			3
Negro	1	1		2
Total Immigration.	8,798	2,198	2,055	13,051
Returned Canadians.	96	37	9	142
Tourists	11	6	1	18
Totals	8,905	2,241	2,065	13,211

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TABLE III.

MONTHLY arrivals of Immigrants for Canada, by Nationalities, via Ports in the United States, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

Nationality.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals
African, South.....	1	1						3		5
Australian.....		4	1	1		1				7
Austrian, N.E.S.....	1	9	5	6				3	315	339
Bohemian.....	3	8	2	5	4	7			1	30
Buckowinian.....		1								1
Croatian.....	14	9	25	18	19	7	7	10	37	146
Dalmatian.....	3	4	2	4	5	2		23	1	44
Galician.....		3				9			1	13
Hungarian.....	3	5		1	22		1		148	180
Magyar.....	15	26	46	42	42	38	22	74	37	342
Ruthenian.....	11	13	29	21	33	76	23	35	62	303
Slovak.....	13		10	11	21	13	11	17	46	142
Belgian.....	1	1	1	6	4	7	8	11	32	71
Bulgarian.....	1	11	1	8	44	29	3	4	20	121
Dutch.....	3	1		2	4	3	11	14	8	46
French.....	22	30	31	55	21	10	19	16	70	274
German, N.E.S.....	72	24	93	110	95	129	72	25	69	689
Prussian.....	2									2
English.....	64	54	61	50	69	324	150	174	1,484	2,430
Welsh.....		2	1		1	2		4	9	19
Scotch.....	30	19	14	13	21	30	16	40	141	324
Irish.....	13	15	18	10	6	20	22	19	72	195
West Indian.....	5	1	6	1		1				14
Jamaican.....			4							4
Greek.....	20	29	22	50	66	8	13	4	19	231
Hebrew, N.E.S.....	2	3	2	1	5	6	20	10	27	76
" Russian.....	69	126	71	65	134	226	147	128	89	1,055
" Austrian.....	4	5	7	6	12	6	5	10	3	58
" German.....					2					2
Italian.....	241	316	302	314	233	287	156	379	1,748	3,976
Poles, N.E.S.....		2		1		2		8	1	14
" Austrian.....	27	20	25	29	55	68	29	34	53	340
" German.....	12			1	1			1	4	19
" Russian.....	8	10	7	9	15	23	14	8	9	103
Roumanian.....	28	9	3	11	22	38	22	75	20	228
Russian, N.E.S.....	13	28	11	6	73	102	54	32	217	536
Finns.....	5	4	4	11	5	12	2	7	13	63
Spanish.....	5	7		1						13
Swiss.....	4			3	1		1	2	9	20
Servian.....				1						1
Danish.....	1	1	3	10	11	3	1	1	16	47
Swedish.....	13	12	14	19	22	12	5	8	26	131
Norwegian.....	8	19	18	8	16	14	14	13	22	132
Turks.....	4	28	19	13	23	40	17		34	178
Armenians.....	4		9		5	4	5	6		33
Syrians.....	14	1	2	5	15	4	7		1	49
U.S.A. Citizens.....						1		2		3
Negro.....	1								1	2
Totals.....	760	861	869	928	1,127	1,564	877	1,200	4,865	13,051

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TABLE IV.

MONTHLY arrivals of Immigrants for Canada, by Occupations and Destination, via Ports in the United States, for the Fractional Fiscal Year 1906-7 (9 months, ending March 31, 1907).

	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Agriculturists.....	55	21	59	42	106	110	47	70	799	1,309
General labourers.....	411	497	450	529	620	793	395	744	2,486	6,925
Mechanics.....	96	92	101	71	151	262	163	300	604	1,740
Clerks.....	40	49	29	33	47	56	75	52	190	571
Miners.....	4	10	12	6	20	12	2	8	26	100
Female servants.....	29	44	42	51	67	116	59	39	182	629
Not classed.....	125	148	176	196	116	215	136	87	578	1,777
Totals.....	760	861	869	928	1,127	1,564	877	1,200	4,865	13,051
Maritime Provinces.....	25	35	31	28	34	42	2	21	66	284
Quebec.....	188	208	214	183	267	296	242	300	1,135	3,033
Ontario.....	328	404	322	389	442	730	385	504	2,599	6,103
Manitoba.....	91	63	128	102	152	280	89	157	512	1,574
Saskatchewan.....	31	42	36	87	65	89	67	29	54	500
Alberta.....	19	31	24	31	76	58	28	23	126	416
British Columbia.....	73	78	114	108	90	69	64	166	368	1,130
Yukon.....	5	1	5	11
Totals.....	760	861	869	928	1,127	1,564	877	1,200	4,865	13,051

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TABLE

NATIONALITY, Sex, Occupations and Destination of Immigrant arrivals for Canada, March

Nationality.	SEX.				TRADE OR								
	Males.	Females.	Children.	Totals.	Farmers or Farm Labourers Class.			General Labourers.			Mechanics.		
					Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.
African, South.....	1	2	2	5	.....	.....	.....	.....	.....	.....	.....	.....	.....
Australian.....	4	12	1	7	.....	.....	.....	.....	.....	.....	.....	.....	.....
Austrian, N.E.S.....	293	37	9	339	114	3	4	163	4	.....	7	2	.....
Bohemian.....	15	9	6	30	1	1	.....	11	1	1	2	1	.....
Buckowinian.....	1	.....	.....	1	.....	.....	.....	1	.....	.....	.....	.....	.....
Croatian.....	134	8	4	146	36	.....	.....	88	2	.....	1	1	1
Dalmatian.....	44	.....	.....	44	.....	.....	.....	44	.....	.....	.....	.....	.....
Galician.....	3	4	6	13	.....	.....	.....	2	1	.....	.....	.....	.....
Hungarian, N.E.S.....	138	20	22	180	93	2	2	37	7	16	6	.....	.....
Magyar.....	241	57	44	342	11	1	.....	220	21	16	8	2	3
Ruthenian.....	248	33	22	303	12	.....	.....	239	18	18	5	.....	.....
Slovak.....	116	14	12	142	2	.....	.....	111	1	2	2	.....	.....
Belgian.....	49	16	6	71	6	3	1	22	5	2	15	2	2
Bulgarian.....	121	.....	.....	121	33	.....	.....	86	.....	.....	2	.....	.....
Dutch.....	32	9	5	46	12	2	1	10	.....	.....	5	3	.....
French.....	148	86	40	274	24	4	3	25	4	1	13	3	7
German, N.E.S.....	284	185	220	689	53	33	59	124	43	87	59	7	3
Prussian.....	1	1	.....	2	.....	.....	.....	1	.....	.....	.....	.....	.....
English.....	1,290	484	652	2,430	247	22	44	350	77	137	408	109	138
Welsh.....	14	4	1	19	1	.....	.....	2	.....	.....	4	.....	.....
Scotch.....	206	93	25	324	29	2	.....	33	1	1	84	14	7
Irish.....	110	72	13	195	18	4	1	20	2	9	21	4	.....
West Indian.....	8	3	3	14	.....	.....	.....	.....	.....	.....	3	.....	.....
Jamaican.....	1	3	.....	4	.....	.....	.....	.....	.....	.....	.....	.....	.....
Greek.....	212	7	12	231	4	.....	.....	191	2	4	9	1	3
Hebrew, N.E.S.....	45	17	14	76	1	.....	.....	11	.....	.....	22	5	9
" Russian.....	364	327	364	1,055	16	6	12	96	25	48	196	104	70
" Austrian.....	23	18	17	58	.....	1	1	14	2	2	1	4	.....
" German.....	2	.....	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....
Italian.....	3,355	346	275	3,976	176	5	9	2,963	161	178	165	19	10
Poles, N.E.S.....	10	3	1	14	.....	.....	.....	8	.....	1	2	1	.....
" Austrian.....	254	51	35	340	1	.....	.....	232	15	20	19	4	1
" German.....	10	2	7	19	2	1	7	8	.....	.....	.....	.....	.....
" Russian.....	83	12	8	103	2	.....	.....	63	.....	.....	12	1	.....
Roumanian.....	177	23	28	228	18	2	10	157	7	15	.....	.....	.....
Russian, N.E.S.....	284	116	136	536	52	13	34	179	29	55	34	21	9
Finnish.....	46	13	4	63	1	.....	.....	41	1	2	4	3	.....
Spanish.....	7	2	4	13	.....	.....	.....	2	1	4	.....	.....	.....
Swiss.....	15	4	1	20	4	.....	.....	3	.....	.....	1	.....	.....
Servian.....	1	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....
Danish.....	24	14	9	47	2	.....	.....	15	2	3	5	1	.....
Swedish.....	81	37	13	131	3	.....	.....	58	5	5	12	.....	.....
Norwegian.....	84	28	20	132	8	1	.....	57	.....	.....	14	2	.....
Turks.....	155	15	8	178	28	.....	.....	114	5	5	7	1	.....
Armenians.....	32	1	.....	33	4	.....	.....	20	.....	.....	7	1	.....
Syrians.....	28	15	6	49	.....	.....	.....	22	9	6	5	1	.....
U.S.A. Citizens.....	3	.....	.....	3	1	.....	.....	2	.....	.....	.....	.....	.....
Negro.....	1	1	2
Totals.....	8,798	2,198	2,055	13,051	1,015	106	188	5,836	451	638	1,160	317	263

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V.

via Ports in the United States for the Fractional Fiscal Year 1906-7 (9 months, ending 31, 1907).

OCCUPATION.									DESTINATION.										
Clerks, Trad- ers, &c.			Miners.			Female Servants.			Not classified.			Maritime Provinces.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	Yukon.
Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	Children.								
1	1	1				1	1	1	2	1		4							
6	2	1				18	3	1	4	12	165	47	93	10	3	9			
						3	2	4		13	2	3	1	5	6				
						3	9	2	3	2	4	111	18	2	2	7			
						1	1	2	6	1	1	33	4			6			
						5	5	4	16	11	85	26	19	16	7	3			
1			2	1		15	18	25	86	7	129	64	37	16	3				
			1			10	5	4	6	69	103	105	11	4	5				
			1			8	5	10	3	1	35	18		44	40	1			
2			1			2	3	4	1		26	7	19	4	7	8			
											2	119							
3	1					5	2	3	4		4	8	26	8					
19	4	2				5	67	66	27	5	172	37	24	17	14	5			
29	3	10	3	1	2	36	16	62	59	4	65	115	262	184	46	12	1		
						1							2						
176	32	11	23	3	6	147	86	98	316	8	364	1,605	208	32	77	129	7		
4	1	1	2			3	1				5	7			1	4			
33	6	1	6	1		39	21	39	16	8	59	167	47	6	4	31	2		
32	8	3	2			40	17	14		2	43	106	15	2	16	11			
1							4	3	3	6		8							
1						3					3	1							
6						2	2	2	5	2	136	80	2			11			
11	3					7	2	2	5		36	28	11		1				
46	16	27				57	10	119	207	12	317	550	137	18	18	3			
7	2	1				3	1	6	13			13	41	4					
2													2						
13	1		28	2		82	10	76	78	39	1,070	2,019	62	5	83	698			
						2					3	8	3						
			1			19	1	13	14	23	101	73	119	2	29	2			
						1				1		6	12						
3			1			5	2	6	8		38	53	7		1	4			
2						12		2	3	1	139	46	21	21					
11	2	1	1			28	7	23	37	13	99	131	137	72	13	21			
						8		1	2		2	50	3			8			
3						1	2				8	5							
4						2	3	2	1		5	7	3	2		3			
1											1								
2						8		3	6		3	11	22	9	1	1			
2			6			27		5	8		6	45	28	14	7	31			
1	1					13	4	11	20	3	5	21	13	20	12	58			
4	1					7	2	1	3	2	26	142				8			
1											1	32							
1						4		1		15	17	16				1			
											1	2							
						1	1				1	1							
428	84	59	82	9	9	629	277	602	898	284	3,033	6,103	1,574	500	416	1,130	11		

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The volume of work at headquarters has not shown any diminution. In the nine months ending March 31, 1906, 90,557 attachments were made to our files; during the similar period covered by this report the number of attachments was 102,956, and during this same period 226,358 requests for information, direct and indirect, were attended to, and 2,957,027 pamphlets, &c., were sent out.

The following is a statement showing immigration literature ordered during the nine months referred to:—

Gaelic pamphlet.. . . .	10,000
The Canadian West.. . . .	1,500
Symposium of Ideas and Prophecies.. . . .	1,500
The Canadian West.. . . .	100,000
Reliable Information.. . . .	2,000
Western Canada a land of Unequalled Opportunities.. . .	2,000
Western Canada a land of Unprecedented Progress.. . . .	2,000
Great Growth of Western Canada.. . . .	2,000
Book of Lectures.. . . .	200
The Story of Western Canada Crop.. . . .	300,000
Farm and Ranch Review.. . . .	5,000
Canadian Year Book.. . . .	5,000
Prince Edward Island pamphlet.. . . .	30,000
Immigration Act.. . . .	40,000
Canada in a Nutshell.. . . .	100,000
Home Building in Canada.. . . .	115,000
Classes wanted in Canada.. . . .	50,000
Land Regulations.. . . .	50,000
Canada wants Domestic Servants.. . . .	50,000
A Travers le Canada.. . . .	20,000
Illustrated Pamphlet of Winnipeg.. . . .	1,000
Everyman's Geology of Three Prairie Provinces of the Canadian West.. . . .	5,000
Eastern Townships.. . . .	30,000
Reduced rates for Settlers.. . . .	100,000
How to Succeed in Canada.. . . .	200,000
Canada Work, Wages and Land (English).. . . .	200,000
“ “ (Danish).. . . .	20,000
“ “ (Norwegian).. . . .	20,000
“ “ (Finnish).. . . .	20,000
“ “ (German).. . . .	20,000
“ “ (Swedish).. . . .	20,000
“ “ (French).. . . .	20,000
“ “ (Belgian).. . . .	20,000
Canada the Land of Opportunity (English).. . . .	200,000
“ “ (Swedish).. . . .	50,000
“ “ (Norwegian).. . . .	50,000
“ “ (Finnish).. . . .	50,000
“ “ (Danish).. . . .	50,000
“ “ (Flemish).. . . .	50,000
“ “ (French).. . . .	50,000
Western Canada.. . . .	500
Climate of Canada.. . . .	500
Western Canada Early Days.. . . .	500
Western Canada Crop Prospects.. . . .	500
What Canada Possesses.. . . .	500
Letters from Successful Settlers (French).. . . .	20,000

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Hangers..	50,000
Facts for Settlers..	100,000
Last Best West..	375,000

Maps.

School Map of Canada (English)..	30,000
School Map of Canada (French)..	5,000
Battleford Map..	10,500
Where and How, Folder Map..	100,000
Manitoba, Saskatchewan and Alberta Map..	11,000
Small Dominion of Canada Map..	5,000

Newspapers.

'Alberta German Herald'..	10,000
'Morning Chronicle,' Halifax..	15,000
'Le Courier de l'Ouest'..	10,000
'Saskatoon Phoenix'..	10,000
Hungarian paper, Winnipeg..	15,000
Polish paper, Winnipeg..	10,000
German paper, Battleford..	25,000
'The Canada' (Swedish Weekly)..	18,000
'Der Nordwesten' (German)..	36,000
'Logberg' (Icelandic)..	36,000
'Outdoor Canada'..	450
'Canadian Life and Resources'..	4,500
'Danebrog' (Danish)..	9,000
'Canada,' London, England..	18,750
'Christmas Globe'..	200

There has been an extraordinary demand in recent years for farm help in the province of Ontario, and in order to assist as far as possible in meeting this demand the plan will be tried this year of employing agents on commission. We have in view somewhere in the neighbourhood of 200 men, residing in agricultural centres in this province, who will, I think, be found willing and able to render valuable assistance in the distribution of immigrants of the farm labourer class. A wide distribution of the help coming in will thus be insured and the expense to the department will be very moderate, as we will only pay for work actually done.

The operations of the department for the fractional fiscal year in the United States are reported on by the Inspector of Agencies, Mr. White, and the medical service is dealt with in Dr. Bryce's report.

I have received a report from The Women's National Immigration Society, 87 Osborne Street, Montreal, showing that during the nine months ending the 31st ultimo 393 immigrants passed through the home maintained by this society at the above address, and the secretary states that the class of women arriving was most satisfactory and that all are doing well.

The Ottawa Valley Immigration Aid Society, which receives some financial assistance from the department, has continued to do good work during the year, the society's register showing an average of something over 200 visitors per month, and a large distribution of advertising matter. From the annual report I learn that the society arranged for ten lectures and directed the placing of 661 settlers, 350 in New Ontario, 190 in New Quebec, and 121 in the western provinces.

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The active and useful work carried on for a number of years by the Quebec and Lake St. John Repatriation and Colonization Society of the province of Quebec has now been taken over by our department, and the secretary and some other members of the staff of the society have become employees of the department. Offices in connection with this special work are now maintained in Quebec and in Biddeford, Maine, and the arrangement is, I think, likely to be productive of good results.

Your obedient servant,

W. D. SCOTT,
Superintendent of Immigration.

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OPERATIONS IN EUROPE.

No. 1.

REPORT OF THE HIGH COMMISSIONER.

OFFICE OF THE HIGH COMMISSIONER FOR CANADA,

17 VICTORIA STREET, LONDON, S.W., August 3, 1907.

The Honourable

The Minister of the Interior,

Ottawa.

SIR,—I have the honour to transmit, herewith, the reports of the agents of your department in Europe on emigration matters for the year ended March 31, 1907.

At the present time these representatives are: Mr. J. Bruce Walker, Assistant Superintendent of Emigration, 11-12 Charing Cross, London, S.W.; Mr. A. F. Jury, Old Castle Buildings, Preeson's Row, Liverpool; Mr. G. H. Mitchell, 139 Corporation Street, Birmingham; Mr. John Webster, 35 and 37 St. Enoch Square, Glasgow; Mr. Edward O'Kelly, 17-19 Victoria Street, Belfast; Mr. H. M. Murray, 81 Queen Street, Exeter; Mr. L. Burnett, 16 Parliament Street, York, and Mr. John McLennan, 26 Guild Street, Aberdeen; Mr. Paul Wiallard, Paris, and Mr. Treau de Coeli, Antwerp.

During the year the agency at Cardiff was closed, and new offices opened at Exeter, York and Aberdeen, Mr. Murray being transferred from Cardiff to Exeter, and Messrs. Burnett and McLennan, who were appointed during the year under review, respectively taking charge of the two latter.

Two important matters which engaged my attention during the year were the question of fraudulent attempts to induce persons to proceed to Canada, and the emigration to the Dominion of persons to whom the provisions of the Immigration Act, which prohibits the landing of certain classes of immigrants, would apply.

The former was a matter which had arisen out of the trouble created by the action of certain interested persons in introducing English printers into Winnipeg during the progress of a strike, and it formed the subject of a visit to this country by Mr. Mackenzie King, the Deputy Minister of Labour. I had an opportunity of fully discussing it with the president of the Board of Trade, and in the end a satisfactory clause was inserted in the Merchant Shipping Act Amendment Bill, then before the Imperial parliament, which passed into law during last session, which makes it an offence, liable to a fine not exceeding £50, or to imprisonment, to induce or attempt to induce any person to emigrate, or to engage a steerage passage, under false pretences.

During the interviews which I had with the president of the Board of Trade, I laid fully before him the objections of the Canadian government to the emigration of persons whose landing in Canada is prohibited, in the hope that provisions might also be included in the merchant shipping legislation referred to above, with the object of meeting the views of your department in the matter.

One of the points I presented was that some measures ought to be taken in the United Kingdom to prevent the embarkation of undesirable emigrants, in order to avoid unnecessary hardship and expense to such emigrants, having in view the fact that the Canadian government had provided itself with powers to deport undesirables, and was determined to enforce them. At present the only statutory powers possessed by the Board of Trade are in regard to the inspection at the port of departure of all steerage passengers about to proceed in an emigrant ship, 'so as to see that none of them appear to be by reason of any bodily or mental disease unfit to proceed or likely

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to endanger the health or safety of the other persons about to proceed in the ship.' This provision, it is held, has reference only to the voyage of the ship, and is only intended to secure that no person is allowed to go on board who is likely, during the voyage, to be a danger to himself or to others.

Mr. Lloyd George gave a very sympathetic hearing to my representations, and assured me that the matter would receive every attention both by himself personally and by his department. Ultimately, however, it was found that the question could not be satisfactorily dealt with in the bill already mentioned, at so late a stage of its progress through parliament.

At the present time no effective means of meeting the views of the Canadian government are available, but I shall continue to watch the matter closely, and shall lose no opportunity of impressing its importance upon the Imperial authorities, with the view of obtaining, if possible, the adoption of provisions to secure the exercise by medical officers at ports of embarkation of a full measure of discretion in rejecting undesirables.

Another serious matter to which I have drawn the attention of the Imperial authorities is that magistrates and others have repeatedly deferred passing judgment on transgressors against the law, on the condition of their being sent to Canada.

I have, from time to time, had direct correspondence with recorders, chairmen of sessions, and others, whenever a particular case of the kind came under my notice, formally and emphatically condemning such action. Attention has also been widely drawn to the views of your department on the matter in the press of this country, and I hoped, as a consequence, no further causes of complaint would arise.

In view, however, of the two further cases which you recently brought to my attention, I felt compelled to make official representations to His Majesty's government on the subject. These negotiations are still pending, but I hope they may lead to steps being taken which will put a stop altogether to countenance being given by magistrates and others concerned to the sending of persons convicted of crime to Canada.

In conclusion, I should wish to state that the emigration work of your department generally on this side may be regarded as in a most satisfactory condition. Canada, as a land of opportunity, looms larger in the eye of the public than ever, and holds a unique position by reason of her manifold attractions. At the same time I have thought it well, on all occasions, to impress upon the agents of your department, as well as upon those private enterprises which are engaged in obtaining labour in Great Britain for Canada, the desirability of keeping well within the mark, when representing to persons of suitable classes who may contemplate emigrating, the great advantages offered by the Dominion.

I have the honour to be, sir,

Your obedient servant,

STRATHCONA,

High Commissioner.

No. 2.

REPORT OF MR. J. BRUCE WALKER.

ASSISTANT SUPERINTENDENT'S OFFICE,
11 AND 12 CHARING CROSS,
LONDON, S.W., May 14, 1907.

The Right Honourable

LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G.,
High Commissioner for Canada.

MY LORD,—I have the honour to submit herewith the report of the Emigration Branch of the Interior Department for the period ending March 31, 1907, together with the reports of the government agents under this branch throughout the United Kingdom, France and Belgium, for the same period.

The financial period ending in March has shown a most agreeable increase in emigration from the United Kingdom to Canada. This increase has been not only in numbers, but, what is of more importance, in quality, and I feel sure that the advent of so many suitable immigrants must be of distinct advantage to the Dominion of Canada.

The visit of the Minister of the Interior last summer, and the close personal inquiry he made into the entire organization from its main principles to its details has resulted most satisfactorily. In consequence of his visit a re-organization and extension of the work of the emigration propaganda has taken place in England, Scotland and Ireland. After consultation with the minister I was instructed to remove the office hitherto existing in Cardiff to Exeter, to remove the office hitherto existing in Dublin to Belfast, to open a new office at York, and to open a new office at Aberdeen. My instructions also were that in the case of the new offices, as well as the existing ones, efforts should be made to obtain premises on the ground floor, with an attractive street front, so that the qualities and characteristics of Canada should be readily advertised. The result of this policy of the minister is abundantly manifested in the vast additions to the number and quality of emigrants leaving these shores this season for Canada. The office windows have been made most attractive and distinctly Canadian, and have been not only the centre of much observation on the part of the public of the respective communities, but have received wide-spread notices from the entire press of the country.

In addition to the amplification of a propaganda in this direction, a system of judicious advertising, particularly in the rural press, has been engaged in. The general policy in this regard has been to avoid the large metropolitan and large provincial city newspapers, and to reach the agricultural classes more directly through the medium of the country weekly, semi-weekly or tri-weekly. In this manner it has been possible to bring the claims of Canada before an increasingly large number of rural readers, and thus touch a class of most desirable emigrants, and those best calculated to make a success of life in the Dominion.

The arrangement by the Minister and the Superintendent of Immigration at Ottawa for a visit of a corps of specially selected farmer delegates to this country has been most successful. These delegates have aided effectively the work of the permanent agents of the department throughout Great Britain and Ireland. The delegates were selected from different parts of the Dominion, ranging from Nova Scotia to British Columbia. They were not only successful farmers, but had the practical experience of a life time of Canadian farming, and were unusually bright, active and energetic men. They were recognized throughout this country as mission-

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aries of Canadian farming life, redolent of the soil which they cultivate, and full of valuable information from a personal knowledge of the existing conditions and requirements in the land they represent.

The quantity and the quality of emigration to Canada are beginning to attract the attention of the 'Home' authorities in this country, being practically limited only to the means of transportation. The agencies to which I have alluded above are largely responsible for the great increase, and I feel that the only barrier to a still further increase in numbers is the painfully apparent insufficiency of steamship accommodation from these islands and from certain parts of the continent to Canada. I venture to think the steamship companies have regarded the situation in this light, as I am pleased to be able to inform your Lordship that the companies now doing business have almost all of them made arrangements for the further extension of their fleets by the purchase and by the building of additional ships, and I sincerely trust that in future years all those who are desirous of settling in our country may be carried comfortably to their desired haven by Canadian bound ships.

Since I have been in charge of the propaganda here, under your Lordship, I have sought to impose a higher standard upon those classes of emigrants over which we have control particularly, and over all emigrants generally. I disapprove strongly of efforts to paint Canada as a 'land flowing with milk and honey,' or a place providing an easy existence for those who are readily tired of work. The greatest attraction of our country is the ready results that follow energy, ambition and determination. I have endeavoured everywhere to impress, and have asked our agents to impress upon the steamship booking agents that the story of Canada and her attractions should be a 'plain unvarnished tale,' and that, in a word, the men whom we want above all others, are the men of ambition and healthy condition; the men of good muscle who are willing to hustle.

I am glad to find the campaign of education carried on for many years by the department here, is bearing good fruit, and that the absurd and antiquated notions that Canada is a place for every 'wastrel' is slowly but surely dying out, and that even amongst the magistracy of the country there are very few who now think of Canada as the 'dernier ressort' of the ne'er-do-weel.

The prospects for the future are extremely bright and encouraging. It is true that in the public press, from time to time, there are letters discounting the advantages of Canada, and taking a gloomy view of the opportunities of the British emigrant. At one time it was considered necessary that official recognition should be made of these communications. That day has passed away. For every letter in the public press condemning the claims of Canada will be found several spontaneous and voluntary efforts advocating the opportunities the Dominion provides for the healthy and determined settler. A comparison between the past and present cannot but be gratifying to those not only in the service of the government, but in the service of the steamship companies who have long laboured to place the advantages of Canada before the public of this country, and there is no small triumph to the efforts of these to compare a paltry 11,000 persons who left England for Canada in 1897 with the 130,000 who will leave these shores for that country during the calendar year of 1907.

I have to thank your Lordship most sincerely, and most cordially, for your extremely warm and personal interest in the Emigration Branch of the Interior Department. I thank you for the ready access I always have to yourself, for the valuable assistance, and for the kindly advice given upon all occasions, and I cannot close this brief report without speaking from my heart of the cordial co-operation of the entire staff of the Emigration Branch, and particularly of the loyal and enthusiastic support I have all along received from the staff of my own immediate office, as well as from the agents throughout the United Kingdom and the continent.

I have the honour to be, my Lord,

Your obedient servant,

J. BRUCE WALKER,

Assistant Superintendent of Emigration.

No. 3.

REPORT OF A. F. JURY.

OLD CASTLE BUILDINGS,

PREESON'S ROW, LIVERPOOL, April 22, 1907.

J. BRUCE WALKER, Esq.,

Assistant Superintendent of Emigration,

11-12 Charing Cross, London, S.W.

SIR,—In presenting my annual report, I am glad to be able to say that the prediction I made last year in regard to the increase in the numbers going to Canada, has been verified, and that with proper guidance the numbers must go on increasing from year to year.

I am pleased to be able to report the most gratifying results from the loaning of exhibits to steamship agents, and I would respectfully suggest an increase in this branch of our work, by supplying the government agents with exhibits in such quantities as to enable them to comply with the requests of all the steamship agents asking for exhibits, as I think this is the cheapest and best way of bringing the claims of Canada before the British public.

The outside work, as usual, has consisted of visiting steamship agents, lecturing and attending agricultural shows.

I have had the opportunity of meeting large numbers of people at the shows and steamship agents' offices, and the lectures, with a few exceptions, have been better attended than ever.

The work in the office has been very much increased, not only by the larger amount of correspondence, and attending to personal callers, but by having the literature and exhibits stored and distributed from here, and by the increased number of deported that are landed here under most distressing circumstances, and who have to be dealt with by this office, without having the power to expend any money to either relieve their hunger or send them to their destinations.

I would respectfully suggest that the government should induce the steamship companies to return deported emigrants to their homes, or give me power to incur the necessary expense.

This has enormously increased the work of the office, and but for the energetic and intelligent assistance I have received from my chief clerk, Mr. Edwin Macleod, it would have been impossible to have got through the large amount of extra work that has been thrown upon this office by the above mentioned causes.

I have the honour to be, sir,

Your obedient servant,

ALFRED F. JURY.

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No. 4.

REPORT OF JOHN WEBSTER.

CANADIAN GOVERNMENT OFFICE,
35-37 ST. ENOCH SQUARE, GLASGOW, April 11, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I beg to submit my report for the year commencing July 1, 1906, to March 31, 1907.

During the summer season, and in connection with the government office at Dublin, I spent considerable portion of my time visiting fairs, markets, agricultural shows and other places where farmers congregate, there being no better opportunity than these for getting into touch with the agriculturists, and spreading the light regarding Canada. In addition to meeting the farmers, I employ a man for the purpose of distributing literature, of which I always carry a supply. When visiting the various towns in Ireland, I embrace the opportunity for calling upon the local steamship agents, and finding out how they are working, and as far as possible encouraging them to fresh effort. It very frequently happens, that in the small towns these agents are publicans, and I do not think it is from that class that the agents should be selected. The average steamship agent does not sufficiently advertise his company. In fact, very many agencies which I have visited have no indication whatever that they represent a steamship company. I would suggest that the steamship owners make careful revision of their agents.

There is a strong movement in Ireland antagonistic to the emigration of its people. As a result of this movement, I have experienced difficulty in securing admission for our exhibit at some of the shows where in previous years we were welcomed, but in spite of all opposition, it is satisfactory to note from the statistical returns, that the number of people emigrating from Ireland to Canada is steadily on the increase.

I have great faith in lecturing, especially so where the engagement is in a rural district. In addition to lecturing myself, I am always glad to lend the slides to parties making application for them.

The hanging map of the Dominion was in considerable demand, and I am pleased to say I have it in display in very many schools throughout Ireland, a particularly large demand for this map coming from the County Cork.

With the beginning of November I received a notification that you had been promoted to the charge of the London office, and that I had been appointed your successor in Glasgow. I immediately made preparations accordingly, arriving in Glasgow on December 4. I realized the importance of the position, and that I had a hard man to follow, but determined to make things go to the best of my ability.

Very shortly after my arrival, extensive advertisements were arranged for through your office. This, of course, resulted in a large correspondence, which kept myself and staff extremely busy.

With the commencement of January, the office was kept open until 9 p.m. three days per week, thus giving an opportunity to those who could not call during day time.

Early in the new year I was advised regarding the coming of farmers' delegates, so at once set to work preparing itineraries for them. Six of these delegates were placed under my direction, so, what between arranging itineraries for these gentle-

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men, office correspondence, and interviews with callers, I had a big work to attend to. I trust that these delegates' visits to Scotland may have materially helped our work. Four of these delegates have left, their work being concluded, and on each of them I have, in accordance with instructions received, reported to you fully regarding their work.

On instruction from the department, I have visited each steamer leaving the Clyde carrying passengers for Canada, and reported regarding the condition and accommodation of steamers, and number of passengers carried. That there is a large migration this year from Scotland to Canada is evidenced by the fact that the two lines, Allan and Donaldson, are fully booked forward to June 8, and now when emigrants require passages they have to book through the Liverpool sailings.

Official duties kept me so close during February and March, that I found it difficult to comply with your instruction that I should visit the steamship agencies in my district, and report on same. However, towards the end of the latter month I made commencement of this work, and hope shortly to be able to complete report regarding these agents.

I was very glad to receive an assortment of grasses and grains for distribution amongst the steamship agents. The grains received, I have made good use of. It would be a great advantage if we could receive, not only grasses and grains, but also samples of other products, including fruits. These would prove attractive, and help to educate the people regarding the possibilities in Canada.

Your active advertising propaganda this season has certainly had great results in increased correspondence and inquiry.

The increased bonus has, without a doubt, proved a spur towards stimulating steamship agents to fresh effort in the interests of Canada. In some cases the steamship agents were inclined to abuse the liberality of the government, by making claims which should not have been advanced. However, I am doing what I can towards checking this.

The emigration returns from Scotland for the year just concluded, should, both in numbers and quality of emigrant, prove satisfactory to the department.

JOHN WEBSTER,

Canadian Government Agent.

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No. 5.

REPORT OF G. H. MITCHELL.

139 CORPORATION STREET,

BIRMINGHAM, March 30, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I beg to submit my report for the nine months ending March 30, 1907.

In regard to the work itself there is little that can be added to what was written last year; my time has been occupied in attending to correspondence, interviewing callers, visiting steamship agents, arranging for the distribution of pamphlets at agricultural shows and other public gatherings in rural districts, supplying steamship agents with literature, and giving them information concerning Canadian affairs generally and emigration pointers in particular by means of typed sheets of Canadian notes extracted from the newspapers, and in other ways, to all of which matters I have had to give my personal attention.

In September last I received a visit from the Minister of the Interior, who at once decided that the office then occupied at 43 Cannon street, on the second floor, must be changed to a more prominent position, and acting under your instructions, after you had seen various premises about which particulars had been obtained, the offices at the above address were secured and fitted up. Being on the ground floor with a shop front, in the principal business street in Birmingham, the pictures and the display of Canadian products, grains, grasses and fruits, with which the window was fitted at once attracted great attention, and a very large increase in the number of applications for pamphlets and verbal information immediately followed. This window, of course, will be a continual advertisement, the value of which can scarcely be overestimated, as not only will it be always in front of the people of the town, but it will be seen by the hundreds of thousands of visitors from the country who visit Birmingham in the course of a year. There is scarcely a moment during the day in which there is not a number of interested spectators around the place.

The constant attention required in connection with the alteration and fitting up of the new premises and the increase in the office duties has interfered considerably with my outside work during the last three months, but this I hope to be able to take up again regularly within a very short time.

The principal shipping agents report the heaviest bookings in their experience, and the fact that all the Canadian liners have been booked up for weeks in advance, speaks for itself; numbers have elected to go via United States ports rather than wait for vacancies in the steamers sailing direct to the Dominion. The demand for second-class accommodation is some indication of the possession of means among those going out, but the third-class passengers also have been of a fine type as a rule, and many of them are possessed of money too, but prefer to keep it for use in Canada rather than spend it on additional comfort during the short sea voyage.

There has been an unprecedented demand for dollars on the agents who change money, and they have run short notwithstanding the fact that some of them at least had accumulated larger stocks than ever before owing to the quantity sent over by settlers to friends, and brought over by those who came to spend a short holiday. I have come into contact with a greater number of these than ever I met in any previous season. The people here cannot but be impressed with this evidence of prosperity

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in the Dominion; testimony of success has been abundant, complaints of failure few, and this is to an extent the cause of a sprinkling of men going out whom one would advise rather to stop at home; their friends or acquaintances have done well, and they will not be deterred, but in accordance with my instructions I have endeavoured to promote the emigration only of women for domestic work and men for farming or railway construction work, those familiar with such occupations especially, but at any rate of those desiring to learn, and of suitable physical capacity.

In regard to women, there is a keen demand here for competent domestic help, but a good number of young women anxious to better their positions are willing to go out, but have not the means with which to pay their fare. Many first rate farm labourers now engaged upon the land and wishing to emigrate are in a similar position.

This spring I have had the assistance of three of the delegates from the Dominion, Mr. P. M. Robinson, Mr. Spanner and Mr. E. W. Brewster. Itineraries were arranged for them in advance, and a great deal of interest was aroused by their visit, the information and advice their practical and recent experience enabled them to give, were sought by large numbers of people, and the advertising, the newspaper interviews and announcements have been of the highest benefit. The good effects will be felt for a long time, as while a proportion of the people seen were ready to go, others, especially those of substance, have to make preparations. One hears the visit of the 1903 delegates spoken of yet.

I find that there is annually a keener inquiry into the advantages of emigration, but unremitting effort, advertising in fact in as many varied forms as can be devised, will be still necessary to maintain the interest in Canada, the more so as the Australian colonies are becoming greater competitors, and have adopted many of our lines of work, going further indeed by giving assistance, and in the case of Queensland, free passages to agricultural labourers. The steamship agents report a considerable inquiry as the result.

I am,

Your obedient servant,

G. H. MITCHELL.

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No. 6.

REPORT OF JOHN McLENNAN.

26 GUILD STREET, ABERDEEN, April 23, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I have the honour to submit herewith the report of this office for the past year.

I arrived here on February 4, and found a large quantity of mail awaiting disposition, with the office unfinished, and the furniture had not arrived. About the 11th day of the month, however, the office was completed and ready for work. It is well fitted for the purpose, being located in one of the best corners in the city, opposite the station from which all trains come in and depart. It is tastily decorated and presents an attractive appearance, and is much admired by the thousands of people who pass.

The city of Aberdeen occupies a unique place in the north of Scotland, not only on account of it being the leading city, but also the centre to which all the surrounding gravitates.

The wisdom of having the office fixed at this point is evident from the very large number of people who have left here. From 25 to 50 have visited the office every day since opening, and over 1,200 have departed for Canada. My work has been largely that of routine order of answering the correspondence from intending emigrants and booking agents throughout the north of Scotland. I made one trip to the City of Inverness, and delivered a lecture to several companies of volunteers from the Islands of Uist, who were in that city drilling, and I am assured that the results have been very satisfactory by the number who have since booked.

The future outlook is exceedingly hopeful, and the class who are leaving here are very desirable. It is my purpose as soon as time will permit to visit every booking agent in my territory, and also to pay a visit to some of the sections in the western country, where there are no booking agents, and where there is an excellent class of people, if we could reach them, and which I am quite hopeful in some measure to do.

An emigration scheme by a gentleman in the north here, who claimed to represent the state of Georgia in the United States, promised at one time to seriously interfere with our work. He had as a representative in this city a well known citizen, and an officer of the city council. They secured some 500 names, but the scheme has entirely fallen to the ground, and the consequent failure of one scheme casts a reflection upon all others on account of the inability of the large number to properly discriminate. I am informed by booking agents, however, that all available space in boats is filled up for the next six weeks.

I have the honour to be, sir,

Your obedient servant,

JOHN McLENNAN.

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No. 7.

REPORT OF L. BURNETT.

16 PARLIAMENT STREET, YORK, April 1, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I have the honour to submit to you my report for the short period this office has been in operation. I have visited a great number of the booking agents in my district, and found the majority of them very anxious to promote emigration to Canada.

Each one seems to have his own particular way in advertising and making his wants known to the intending emigrants, whom they generally book to some of the large cities, instead of to the country agents, appointed by the government to locate them on farms in Ontario, until they have got experience which they ought to have to make sure success for themselves in the west.

I do not know how this office compares in appearance or the volume of business done for the time it has been in operation, but I think it is doing fairly well, and I intend to do what I can to obtain for Canada the very best class of farm labourers and domestic servants possible.

Your obedient servant,

L. BURNETT.

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No. 8.

REPORT OF H. M. MURRAY.

81 QUEEN STREET, EXETER, March 31, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I beg to report on the work of this agency during the nine months ending March, 1907.

At the direction of the Minister of the Interior and yourself my headquarters were removed from Cardiff, South Wales, to the city of Exeter, where the department has now a very fine office situated on the ground floor in one of the principal streets, with a couple of front windows well adapted for showing the produce of Canada. These windows being lit up at night with coloured electric lights are a great advertisement, causing crowds to assemble, discuss Canadian affairs, and come in to inquire for further information and ask for our pamphlets. The city of Exeter in the county of Devon is the centre of a splendid agricultural district, and already during the two months we have been located here good results have followed from our work. Correspondence is far in excess of that received in Cardiff, averaging as it does about forty letters daily and about the same number of personal callers for information; during the same period about one thousand bonus claims have been received, clearly proving that a good class of agriculturalists are moving from my district to Canada. So far Devon, Gloucester and Somerset are showing the best results, Hereford coming next. Wilts, Cornwall and Dorset are pretty slow, but I hope by next year to show a good return from these counties. The returns from Herefordshire come almost exclusively from the county town, the agents there being good active men are doing very well indeed. The same thing I might say applies to South Wales, as the bookings at Cardiff equal, if they do not outnumber, the whole principality.

I have devoted a part of each week to visiting the booking agents in my district, reports in regard to this work have been sent you weekly. A great number of these men are doing splendid work in the way of bookings for Canada. No doubt the bonus of £1 paid by the department on certain classes has been a great incentive for these gentlemen to work on our behalf. They are now spending more money upon advertising and making a better show at their doors and in their windows. Others, more especially in the small country districts, would like this done for them by the department or the steamship companies whom they represent. I hope in time, however, that when the agents of these small rural districts find an increased return from advertising work they will go more fully into it.

I was glad to have the assistance of Mr. Willans who lectured to large and appreciative audiences at Gloucester, Cheltenham, Bristol, Cardiff, Highbridge, Bridgewater and Exeter, as also Messrs. Aylesworth, Goulden, Beatty, Wilson and McLaughlin, from Prince Edward Island, as farmer delegates. All of these gentlemen have put in some splendid work, with good results. This I have proved by the fact that bonus claims have very shortly after their visit to a certain district been received in considerable numbers, and the booking agents with whom they were placed highly appreciated their services.

The motor wagon with exhibits of Canadian produce did some useful service at a number of agricultural shows in my district. It was a splendid exhibit and showed to many thousands the possibilities of Canada in an attractive and practical manner.

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Our lantern slides have been in active use during the winter. Many local clergymen and laymen have delivered voluntary lectures on the Dominion, thus making known to a wide circle the opportunities offered to desirable settlers.

The correspondence received during the nine months ending March 31 amounted to 2,938 and 3,841 sent. These numbers I am certain will be materially increased during the forthcoming fiscal year.

I was very glad to have had a visit from the minister at the end of last year which gave me an opportunity of personally explaining many of the features of our work.

I desire, sir, to thank yourself personally, as also the members of your staff, for the invariable assistance and advice I have received in regard to the work of emigration in which we are all equally interested.

I am, sir,

Your obedient servant,

H. M. MURRAY.

Agent for South Wales and West of England.

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No. 9.

REPORT OF EDWARD O'KELLY.

CANADIAN GOVERNMENT OFFICES,

17 AND 19 VICTORIA STREET, BELFAST, April 1, 1907.

J. BRUCE WALKER, Esq.,

Assistant Superintendent of Emigration,
London.

SIR,—I beg to present my report for the fiscal year ending March 31, 1907. In consequence of the change in the date of the termination of the year, this report only covers a period of nine months. The number of callers at my office in the time above mentioned, and who registered their names and addresses was 3,569, which shows a proportionate increase over the year 1906 of 1,011.

The number of letters received 2,253, also dealt with proportionately, shows an increase of 1,017 over the year 1906.

The number of letters sent out, mostly containing literature, as well as the information required, was 2,476.

I attended with my stand of specimens of Canadian fruits, grain and grasses, at six show fairs, and found the people even more anxious than in the preceding years to examine the exhibits, hear all I could tell them about Canada, and obtain the pamphlets. The Canada stand has now become well known at show fairs, and is always crowded with people, many of whom informed me that their friends are doing very well in Canada, hence I suppose the ever-increasing interest in the stand.

I may say here that many of our newspapers constantly publish letters to me, from well satisfied settlers in Canada. Our success in inducing the Canadian Pacific Railway Company to call at this port every fortnight has also helped emigration to Canada and proved a profitable undertaking for that company, as we have almost always more people than they can provide accommodation for.

Acting on instructions received from the deputy minister, I visited Canada last October, and spent over two months travelling through the provinces of Ontario, Manitoba, Saskatchewan, and Alberta. I went west from Winnipeg on the Canadian Northern Railway to Edmonton through a district new to me, but which I can now recommend to intending settlers as a splendid agricultural country. During my stay in the west, I visited Old and New Battleford, Fort Saskatchewan, Edmonton, Strathcona, Red Deer, Calgary, Macleod, Lethbridge, Regina, Saskatoon, Prince Albert and Brandon. At all these places evidence of substantial growth and prosperity was apparent to me, and from many settlers who came to see me, having emigrated through this office, I was pleased to hear of nothing but success in the past, and faith in the future. The rapid rise of some of these men, notably in Winnipeg, Edmonton, Calgary, Regina and Saskatoon is marvellous. I attribute the increase in the number of callers at this office at the beginning of the year to some articles which appeared in the newspapers, commenting on my experiences in Canada. After closing the Dublin office in February, and being placed in charge of emigration in Ireland, I made a trip through the Midlands and south of Ireland, making myself acquainted, as far as possible, in the time at my disposal, with the prospects of emigration to Canada. I cannot say I found much encouragement either from conversations I had with the inhabitants, or from answers I had from the steamship booking agents whom I questioned when calling on them and inspecting their offices in Dublin, Sligo, Limerick, Cork, Waterford, Wexford, Kilkenny and Wicklow. As I have known for some time,

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and stated in my last report, the booking agents in many districts are timid about advertising, particularly when they are shopkeepers, which they mostly are, except in the cities.

I forwarded to you my reports on these agencies, and since then I have inspected and reported on the principal steamship agencies in Ulster, making sixty reports in all.

With reference to the new organization formed by the government for the help of the steamship agents, I can only say that the agents so far are not availing themselves, to any extent, of the assistance afforded them. They give many reasons for not doing so, such as 'that the emigrant generally knows where he, or she, as the case may be, intends going to before they call on him.' They also state that numbers book directly to where they have friends doing well. I must say such has not been my experience, but lately the bulk of the callers at this office have been people with more or less capital, and with their minds fixed on the west, they are always pleased to take my advice as to a particular district. I fear the great reason for the agents here not dealing with the employment agents in Canada is that they are keenly alive to the trouble doing so would entail, and they see no money in the scheme for themselves. Added to this, a great number of the rural steamship agents engaged in shopkeeping have their places so crowded with goods they have hardly a place to write in.

The delegates sent to Ireland (the Rev. T. E. Burke, Mr. John Kennedy, Mr. John Fluker, and Mr. Joshua Fletcher), have been fairly successful, Mr. John Kennedy notably so, who had a month's start of the others.

The number of trade inquiries received at this office have been few, and generally referring to the tariff.

Your obedient servant,

EDWARD O'KELLY.

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No. 10.

REPORT OF D. TREAU DE COELL.

ANTWERP, BELGIUM,

PLACE DE LA GARE, 23, March 31, 1907.

J. BRUCE WALKER, Esq.,

Assistant Superintendent of Emigration,
London.

SIR,—I have the honour to submit the following report from July 1, 1906, to March 31, 1907.

Authorized by the department, I paid a flying visit to Canada, sailing from Antwerp on July 19, I was back at my office on September 1. During this short space of time I had the pleasure to travel as far as Edmonton, and to visit the new Belgian and French colonies, on the Canadian Northern, namely, Vonda, Howell and Aberdeen, where since a couple of years many a Belgian family has settled, every one of them having succeeded beyond their expectation.

Edmonton, which I had visited in 1898, had so wonderfully changed that it seemed to me a new city, and only for the picturesque sights in the immediate vicinity of the town, the splendid grandeur of the Saskatchewan river, I would never have believed that it was the Edmonton of eight years past. My intense desire of returning to Belgium in order to meet the Hon. Frank Oliver, Minister of the Interior, before his return to Canada, necessitated my speedy travel and the breaking off of many visits promised or engagements taken. I was convinced, however, that the great advantages Canada offered were increasing daily.

As before stated, I arrived at Antwerp on September 1, and I was pleased to meet the Honourable Minister of the Interior at my office, who already had received from my assistant any information he desired concerning the work done, the result obtained, &c. I supplemented all this by a general review of the emigration work, and I remarked with great satisfaction the keen interest the Hon. Frank Oliver took in everything that could further Belgian emigration.

The rooms occupied as offices not being in a central place, I designated premises close to the Main railroad station, one of the best situations in Antwerp. I was ordered by the minister to rent these and to have them fitted up, so as to be a credit to Canada. I acted according to the instructions received, and one month later I opened in Antwerp one of the best Canadian government offices, decorated by grasses, grain, stuffed fowls, appropriate photos and prints.

A new era began at once, visitors and inquirers came in, the public was aroused and felt interested by the superb display of the Canadian products, and most of my time was taken up by interviews.

Meanwhile I obtained from the department the authorization to publish a monthly paper in the French and the Dutch or Flemish languages, giving items of interest to future emigrants, especially letters from Belgians and Hollanders, settled in Canada, relating their experience and their success. This little periodical was eagerly looked for; I received from every corner of Belgium, of Holland, and even of Canada, letters full of praise, looking at the periodical as the most interesting and the most practical propaganda that could be made. This also resulted in an increased demand from teachers for maps and geographies. In my yearly report of July 1, 1905, I stated that in 22 schools the geography of Canada was taught; at this time, one year and nine months later, 505 teachers have the large map in their school and a sufficient number

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of geographies to satisfy their scholars; the demand is increasing daily, encouraged, nay, I may say, ordered by the school inspectors, acting upon the advice of the Department of Public Instruction.

While in Belgium everything looks promising, I am pleased to state that in Holland also the idea of emigration is advancing wonderfully, the Department of Foreign Affairs of the Netherlands has issued an official circular in which it summarizes some of the information given in the Canadian pamphlets, adding to this certain important instructions, finishing said circular by referring the would-be emigrant to myself for literature and information.

The printing of certain pamphlets in the Flemish or Dutch language, namely, 'Canada in a Nutshell,' 'Canada the land of opportunities,' and 'Canada, Work, Wages, Land,' will be a great propaganda help for the Flemish Belgians and for the Hollanders, and I shall endeavour to have these distributed in the most efficacious manner. The result of my work has been very satisfactory. It would be impossible to give the number of Belgians and Hollanders who emigrated, but I state with pleasure that the emigration has taken a new phase. A few years ago young men could be induced to leave, families very seldom. At present young men emigrate, but not so much for themselves as to open the way to their parents and family. Husbands are going, they work for a season, take up land, prepare a home and return for their wife and children, and these are not isolated cases, but have occurred repeatedly. At the same time, during their temporary sojourn here they are a great help at my lectures and meetings, and in every case take a certain number of emigrants with them.

Add to this the pleasing feature of the emigration of families with sufficient capital to settle on a farm and in many cases with a large amount of cash, the certain fact that the new colonist shall succeed, and by his letters published in the periodical becomes an assistant to the emigration propaganda and also that Canada is actually the only country which can offer the splendid advantages of homesteads to all newcomers, and I am confident that every one will feel assured that emigration from Belgium and Holland will increase continually and that the great majority of the future emigrants will be of a better class and that the social and financial position of them will certainly be superior to what it has been before.

Your obedient servant,

D. TREAU DE COELI,

Canadian Government Agent.

No. 11.

REPORT OF PAUL WIALARD.

AGENCY OF THE CANADIAN GOVERNMENT,
10 RUE DE ROME, PARIS, April 1, 1907.

J. BRUCE WALKER, Esq.,
Assistant Superintendent of Emigration,
London.

SIR,—I have the honour to present to you my report for the year ending March 31, 1907.

During the nine months of the present term I have been able to confirm to the French public the favourable opinion of Canadian matters of which I have spoken in former reports.

I have travelled much in the provinces, meeting in groups the persons who are interested in our country or disposed to go there and who had previously asked for information of a nature to assist them, either in making a decision or in the final execution of their project. In such cases, I recommend them to bring together as many persons of their acquaintance as they wish, but I am debarred from holding any public meetings by reason of a circular issued by the Minister of the Interior of France in 1904, reminding the mayors and prefects of the restrictive provisions of the emigration law.

This year we have a delegate, Mr. Vauriot, a Frenchman settled in Manitoba for many years and who has succeeded there. He has taken part in some of our gatherings and has been able to judge of the work that we do. In company with Mr. Pierre Foursin, my colleague, whom I sometimes send into the provinces when I am detained in Paris or called in another direction, Mr. Vauriot has himself spoken and given verbal information in regard to the Northwest at five private assemblies held in four days, and at each of which there were present from forty to fifty persons, making ready to leave, and in every case enthusiastic for our country.

In regard to the question of publicity, as we have already said elsewhere, we cannot make a very active propaganda by means of the press, as is done in England and in those countries where no prohibitive law exists; we enjoy, however, a certain liberty in this respect, of which we shall know how to take advantage, as we have done before. Newspaper articles, distribution of pamphlets having only an historic, geographic, or economic character, and consequently not giving rise to any objection on the part of the authorities, notices drawing the attention of the public to the existence of the office of the Commissioner General for Canada, always ready to give official information as to the advantages offered to certain classes of emigrants; such are the means we have employed up to now and which we count on using further and on a larger scale, to accentuate still further and to increase the favour which our country enjoys in France. I have no doubt but that the department will aid me here, and that one can see a manifest proof of its determination to put me into a position to still further develop my work by the fact that three new pamphlets will shortly be published in France. I will superintend the composition; they will, of course, be adapted to the wants of my district.

To understand the question of French emigration one must not judge alone by the visible results, but take into account all the surrounding circumstances. In England emigration is free to all who will. There is only an embarrassment as to the choice between the colonies, and nothing to hinder or arrest the propaganda which

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is made. The United States have not any restrictive law to bar the road to our agents. There is no enforced military service in that country to keep back the young men in their scheme of expatriation; the proximity of Canada, whose wonderful progress they follow day by day, does the rest. In France, on the other hand, military service, a restrictive law, the efforts of the French government to people its own colonies, the advantageous offers of material advances by different countries (Chili, free transportation; the Argentine Republic, until recently, half fare), the fertile soil and favourable climate of their own country, old standing prejudices, the opposition of the press, and doubts raised as to the truth of our pamphlets, such are the principal difficulties and reasons which make our task not as simple as it would appear from a distance. But we are meeting with some measure of success, and are not pessimistic as to the future.

Our correspondence has heavily increased. The number of visitors asking for pamphlets and verbal information becomes every day more considerable. My colleague, Mr. Foursin, is specially charged with replying to these visitors, and acquits himself of the task, not only with assiduous zeal, but with all the capability that he has acquired in the service of Canadian affairs for many years.

With my thanks for the assistance which the London office has given me without cessation in the accomplishment of my mission, I remain,

Your obedient servant,

PAUL WIALARD.

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OPERATIONS IN THE UNITED STATES.

REPORT OF W. J. WHITE, INSPECTOR OF AGENCIES AND
PRESS AGENT.DEPARTMENT OF THE INTERIOR,
April 15, 1907.The Superintendent of Immigration,
Ottawa.

SIR,—Owing to the fiscal year now ending March 31, instead of June 30, as formerly, the matters herein referred to will be only of nine months record. This will prevent my dealing with what are known as the 'moving months' as applied to United States settlers. These months are April, May and June; during these months the larger number of people move, and the figures given therefore apply only to the nine poorest months.

The official returns, which I presume will appear in your own report, show that during the nine months constituting the present fiscal period 34,659 persons from the United States arrived and declared their intention of becoming settlers in Canada. The number during the same period last year was 32,726, which shows an increase over the same period last year of nearly 2,000. This is decidedly satisfactory, and is fully up to what I had expected. Had weather conditions during February and March been normal, these expectations would have been far more than realized. It is scarcely necessary to point out that in all parts of the continent the weather of the past three months has been wretchedly bad. It was not only so in our own west, but throughout the States in which we are operating. For some weeks one of the lines leading out of St. Paul, Minn., to the Canadian boundary was completely 'tied up,' and did not move a passenger or a pound of freight; the remaining lines were more or less demoralized. Whatever business was done in moving people, was over these handicapped lines, and not the least of the troubles of the settler was the difficulty of getting cars for his freight. In addition to this the Canadian roads passing through the territory into which the larger number of people are at present going suffered considerably from inadequate facilities and the wretched weather conditions. These facts are so well known that I consider it only necessary to merely direct your attention to them.

In consequence of this, early in the calendar year, our agents in the United States were asked to advise prospective settlers not to move until conditions were more favourable. In fact, owing to bad roads, in many portions of the States, they could not have moved any way. As a result, while the figures for the first three months of the calendar year were up to expectations, it will easily be seen that the increase would have been considerable and the percentage much higher than in any previous year, with less unfavourable conditions. The enforced situation may cause some of these who were prepared to go and did not, to change their minds and not go for another year. The agents will keep in touch with them, and it is hoped they may not be lost to Canada.

Advantage has been taken of the backward condition just referred to by the railway companies and land agencies in the United States, not favourably disposed towards the Canadian movement, to divert people to other directions. This has to be combated, and we are pretty well able to do so by using more strenuous efforts and

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also in keeping the Canadian possibilities strongly to the front. We are assisted by the fact that the unprecedentedly bad weather is general. Temporarily, however, it will affect our work, that is to say, there will not be the large increase in numbers that we would otherwise have had.

Doing as well as we are, it may not seem necessary to refer to the above, nor to a recent ruling of the Interstate Commerce Commission, which makes the work of moving people more difficult. As it is a matter of public interest, however, I will be pardoned for referring to the fact that as a result of this ruling, and of the passage of two-cent a mile rates through a number of the States, the railways have eliminated the low rates heretofore given to homeseekers and settlers, the basis now being the ordinary rate. This will have an effect on some possible movers, but in the main will not prove as injurious to our work of securing *bona fide* settlers as might be at first imagined.

I referred in my last report to the interest that land in the southern and western states was arousing. Large areas have been opened up, and at present these lands are quoted at low prices, running from \$5 to \$8 an acre. They are entering strongly into competition with western Canada lands, but as soon as prices advance, which in the natural order of speculation is sure to come shortly, the intrinsic value of Canadian lands will demand as large (or larger) a share of attention as ever.

Since my last report, a change has been made in the literature published by the Immigration Branch. 'Last Best West' takes the place of 'Twentieth Century Canada,' and with its comprehensive scheme of up-to-date township maps of the entire surveyed portion of western Canada, the system of question and answer columns, and its splendid illustrations, it is having a wide and useful circulation. It is being published in English, German, French and in the Scandinavian languages. Large numbers are distributed at fairs and at special exhibits put up by the government. A special edition for distribution at the Dublin exposition is in course of preparation.

Educatively the work in the United States is fully taken care of. Besides the distribution of literature just referred to, during the winter months, information concerning Canada was supplied to several of the women's study class clubs. At these clubs papers were read dealing with Canadian social and economic questions, and much interest was aroused amongst an exceptionally fine class of people.

At such fairs and exhibitions, whether state or county, at which permission could be secured to place an exhibit, displays of western Canada grains and grasses were made. These arranged in neat sheaves by the Winnipeg office, can always be put up in an attractive way. Churches have asked for and been supplied with samples with which to decorate for harvest home and thanksgiving festivals, and when asked for by schools for educational purposes the request is always granted.

Work is still being carried on amongst the French and French-Canadians in the United States. In addition to the agents who have hitherto been working amongst this class there has been opened an office at Biddeford, Maine, the object of which is to increase the efforts previously made in bringing about the repatriation of as many of the French-Canadians of the New England states as possible. The prospects for this work are very good.

Amongst the Germans and German-speaking classes, special work is being done, and it is hoped that as a result a much greater number of these people than before will become Canadian settlers.

The Scandinavian work is being well cared for, and it is found that this splendid class of settlers is going forward in increasing numbers.

Amongst the other nationalities no special work is being done beyond some amongst Danes, and such as may be looked upon as desirable in a farming country.

During the early part of the winter one of the agents went to California, and succeeded in working up considerable interest, securing a number of settlers, but with the larger and more populous fields elsewhere, it is a question if there can be devoted to this work any effort beyond what is now being done.

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Besides the regular advertising, which is carried in the principal farm papers, in the country weeklies and in such other mediums as reach the country reader and farming classes, during the past summer the members of the Pennsylvania Editorial Association were taken on a trip through western Canada, as far as the coast. In this the Grand Trunk Railway, the Canadian Pacific Railway, and the Canadian Northern Railway co-operated, and editorial articles, taking up a large amount of space, appeared in the papers represented.

On the whole the campaign in the United States is very satisfactory.

Again I have the pleasure to report that the agents of the government operating in the different fields, covering practically every state from Maine to Oregon, and from the Dakotas to Oklahoma, where there is a possibility of getting a good class of settlers, are working hard and faithfully, and to their efforts is due a large share of the credit of the work that has been done.

Your obedient servant,

W. J. WHITE,

Inspector of United States Agencies and Press Agent.

REPORTS OF IMMIGRATION OFFICIALS IN WESTERN CANADA.

REPORT OF THE COMMISSIONER OF IMMIGRATION.

WINNIPEG, April 1, 1907.

W. D. SCOTT, Esq.,
Superintendent of Immigration,
Ottawa.

SIR,—I beg to submit the following report, covering the period from July 1, 1906, to March 31, 1907, being the present termination of the fiscal year.

Comprised within this report will be found much information furnished by immigration agents, land agents, land guides, interpreters, and others who, by their immediate contact with, and personal attention to the newcomer, have enabled me to state with renewed confidence that the work of the department has been to the general satisfaction of all concerned.

The increased railway mileage, the necessity of which was referred to in a previous annual report, has not materialized; and, unfortunately for the comfort of some of the new settlers, such extension as there has been has not carried with it an adequate amount of equipment, to give to such new settlers the accommodation they might fairly expect. Many miles of railway only partially constructed, and not operated, have been useless for our purposes up to the present time, and the need of proper equipment has been especially and severely felt when it became necessary for us to seek out and protect the unfortunate or unprovided for immigrant, who, in his search for a free home, had been obliged to go beyond the lines in regular operation. Too much emphasis cannot be laid upon the importance of rapid railway construction; but that is useless unless the road be operated and continued in operation under ordinary reasonable conditions of weather. The handling of so many human beings from so many different parts of the earth, arriving under conditions widely divergent, and having capabilities often of a very mixed character, has been a duty which, I am pleased to say, has been carried out by our staff with a good will and interest in the work, and desire to give the new arrivals the best opportunity for ultimate success.

Very special care is taken to detain and deport immigrants who turn out to be undesirable, incapable or unfit; and it being the stated policy of the department to keep the stream of immigration as pure as may be, particular efforts along these lines will be continued. But notwithstanding the assiduity with which this work has been conducted and the heavy immigration, I am pleased to report that only 82 persons were deported through this office during the period of nine months covered by this report.

The betterment in numbers, physical condition, working capacity, general character and moral tone of those who have come from the old land is particularly noticeable. It is evident that the successful settlement of immigrants which took place in earlier years is now proving to be one of the chief inducing factors to those in the mother country; and it is confidently expected that a steady ratio of increase in immigration from the British Isles will be the good fortune of Canada for several years to come. At no time during the past nine months have we been unable to find work for the willing, able-bodied worker; and indeed the condition of the labour market, as far as it affects the farmer, is by no means a rosy one. The fear expressed

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in my last annual report that there would be a shortage of farm labour has already been confirmed; and the warning which I published in the fall of 1906, suggesting that farmers should make special efforts to keep in their employ for 1907 those they had then engaged, does not appear to have been taken very seriously. The consequence is that we are already flooded with applications for men, which there appears to be every chance of our being unable to fill. Large numbers are arriving, and will continue to arrive, to work on railway construction, and, in order to secure these men the railway contractors offer wages which, to a good many farmers, are prohibitory; and their hope of securing sufficient help on the farm lies in the possibility that a certain percentage of those engaged for railway work will be found unsuitable, and that they will then turn their attention to work on the land.

The Welsh settlement of Llewellyn, Saskatchewan, appears to be succeeding, and some of the settlers are already quite prosperous. One or two families who were born in Patagonia have returned to the land of their birth. The colony has probably 4,000 or 5,000 acres under wheat; 2,000 acres under oats, 200 acres under barley, and an additional 2,000 acres of new breaking ready for 1907. They own 300 horses, 600 head of cattle and 300 hogs, besides an abundant supply of agricultural implements and poultry. There are four school houses in this settlement, and the satisfaction appears to be general.

A Welsh settlement east of Ponoka, in Alberta, is also in a progressive and satisfactory condition.

The Irish arrivals have increased and will make very desirable acquisitions to western Canada.

Germans from Germany, and German-speaking immigrants from Austria, Russia, Switzerland, and the United States have come in increased numbers. There is a generally prevalent idea amongst German immigrants that more vigorous measures should be taken to induce Germans to come to this country from Germany direct.

I am glad to report that the immigration from the Scandinavian countries and of Scandinavians from the United States has kept up fairly well, but the increased cost of transportation is likely to militate against an increased immigration from Europe. Scandinavians coming from the United States are farmers of the best class, and reports to hand indicate that almost without exception they are successful settlers in Canada. There has been no trouble in finding employment for those seeking work, and thousands of others could have been easily accommodated if they had been here for that purpose. Coupled with the demand for farm help, we find a general desire to secure Scandinavian servant girls, and many of them would be assured of good homes if they could be induced to come to western Canada.

Icelanders came from Iceland direct, and from the United States, mostly from North Dakota. These last mentioned brought in a large supply of horses, implements and household effects, and had more or less cash, having been farming in North Dakota for a number of years. In November last a large party of Icelandic settlers from North Dakota was conducted by myself to the Quill Plains district in Saskatchewan, and it is expected a number will follow this spring. Considerable correspondence has been carried on with other intending Icelandic settlers, and it is hoped that good results will be seen at an early date.

Our Swiss immigrants practically all went on the land. We are not able to offer any specific report regarding them, but believe that the absence of information indicates that they have become settled to their satisfaction.

A new colony of Hollanders has been started northwest of Battleford and 30 families are now located there.

A number of the Hebrew arrivals have no intention of homesteading, but find work as labourers, tradesmen, and otherwise, in and about the cities and towns. However, the settlements of Hebrews in the Qu'Appelle and Wapella districts appear to continue to make very satisfactory progress, having an increased acreage under crop and a large number of live stock in each place. I am pleased also to be able to report

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a very satisfactory condition at Hirsch, Saskatchewan. There are at least 65 Hebrew families located on land in this district, being an increase of 13 families over that of the previous year; and all have 320 acres of land, if not more, which has been in part purchased from the society that originally owned the land, or from land companies and private holders. The following figures and facts will show the gratifying progress made by these Hebrew families, and prove that, under reasonable conditions, and guided by experienced leaders, they are fully as successful as any other class of people in Canada. Including their new breaking, each of these families, on the average, will have not less than 200 acres in crop during 1907. The crops of 1906 were very fair; oats averaged 45 bushels per acre, and wheat 18 bushels per acre, mostly grading No. 1 Northern, and realized from 60 to 62 cents per bushel. There has been a steady and marked improvement in the character of the buildings on these holdings, and a conservative estimate would show that each family owns, on an average, 8 horses, 10 horned cattle, and all necessary agricultural machinery, besides farming stock, and in the district there are now 10 steam threshing outfits. The holdings of these Hebrew farmers are worth \$15 to \$20 an acre, and a fair estimate would show that each family is worth not less than \$4,000, over and above all debts. There is no destitution, and no need of assistance from any source. Abundance of coal for fuel is obtained within easy reach by going to the mines and purchasing it at \$1.75 per ton. The general health of the colony is good.

When referring to Galicians we usually include Ruthenians, Galicians proper, Buckowinians, Poles, Russians and Slovianians. The Ruthenian people who come from Galicia and Buckowina are farmers, some of the married men bringing their families; others were single men who intended to work and remit their wages to enable their friends to reach Canada. Most of these newcomers located as near as possible to their friends in the older Ruthenian settlements. One party consisting of 10 families commenced a new settlement 20 miles northeast from Prince Albert. The general progress of all these settlements is very good, those who have been here for some years not hesitating to invite their relatives still in Galicia to come and join them. As an evidence of their prosperity, it is found that a large number are purchasing more lands for agricultural purposes. Some of the Galician farmers near Rosthern threshed 4,000 bushels last year. In addition to the class of immigrant who has settled on the land throughout the Northwest, which is the ultimate desire and object of all settlers from Galicia, a large number have settled in the towns and villages, and nearly all of them have bought building lots, built houses and are making a living. The towns containing this class in fairly large numbers are Winnipeg, Portage la Prairie, Brandon, Beausejour, Edmonton and Yorkton. It is noticed that quite a percentage of the Russians coming this way are passing over to a Russian settlement in North Dakota; those remaining here join the ranks of general labourers. The Slovaks arriving in small numbers readily find work as miners and labourers. Our interpreters have visited as many of the settlements as time permitted, and found the people generally well settled and contented.

The great majority of the French and Belgian immigrants are farmers and have taken up land. Most of the Belgian and French-Canadian immigrants and settlers have gone to Lake Lenore, Jack Fish, Goose lake, Tramping lake, and southwest of Moosejaw in Saskatchewan, and in Manitoba some have gone east of Lake Manitoba, to Teulon, and to Makinak. In Alberta these settlers have gone into the districts east of Stettler, Daysland, and on the Battle river, and a number have settled east and west of Red Deer, and also north of Morinville. Indications would show that possibly 150 families will be located north and east of Wood Mountain on the Canadian Pacific Railway during this season. These settlers are very successful and thrifty.

The majority of the Italian immigrants for the period covered by this report were navvies for work on the railways, or in the mines. The bulk of these navvies return east in the winter, but some of them have expressed their intention of taking up land and remaining here.

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A large proportion of the Hungarians who arrived went to their friends and have located upon land in various parts of western Canada. These people are very satisfactory settlers in every respect, and their immigration should be encouraged as far as possible.

IMMIGRATION ACCOMMODATION.

The Dominion government maintains immigration halls at Winnipeg, Brandon, Saskatoon, Lethbridge, Moosejaw, Yorkton, Regina, Prince Albert, Calgary, Strathcona, Craik, Davidson, Duck Lake and Lloydminster, and has rented (or will rent during the season) for the same purpose, buildings at Ponoka, Innisfail, Lacombe, Battleford, North Battleford, Vermilion, Leduc, Stettler, Daysland, Virden, Elkhorn, Sedgwick and Vegreville, and provide tents for additional temporary accommodation wherever the necessity may arise.

The new buildings at Winnipeg are proving a considerable convenience to new arrivals, and enable the office staff to attend to their varied wants with much less difficulty than in previous years. The class of persons receiving accommodation has been in every respect desirable, and they find the free accommodation of material assistance in making their arrangements. This can be best understood when it is remembered that a very large proportion of those arriving from the old country have exhausted the greater portion of their means in paying the transportation charges for such a long distance, and if men with families were obliged to pay for hotel accommodation at western rates, it would entail hardship that many of them could not stand. The regulations of the department permit seven free days' accommodation, but this office has steadily pursued the policy of getting the people out to work, or on to the land immediately, so that a large proportion of them do not remain more than one day; while in other cases where unfortunately sickness or other temporary disability has overtaken a family, I have not hesitated to care for them and permit them the use of the building for such period as might appear to be advisable, or necessary, in order to enable them to make a fair start. I have given the same instructions to outside agents in charge of buildings, and to this general policy of protection and assistance for the newcomer may, to a large extent, be attributed the lack of complaint connected with the work of handling so many thousands of people. From the centres at which our buildings are situated our agents have been able to afford assistance in any difficulty which may have arisen during the past winter, or at any other time, and I cannot too strongly recommend the continuance of the policy which enables us to have sufficient offices reasonably near the new settlements to afford protection for the new arrivals.

EMPLOYMENT.

Two hundred and ninety-three applications for married couples have been received at this office, but of these we have only been able to fill 195. Five thousand four hundred and forty-eight individual applications were received here from farmers for farm help, and thousands were received by our agents in the west, but at no time has the supply equalled the demand, plainly indicating that the great west can absorb much more farm help than has yet been received. Twenty-two thousand eight hundred and fifty harvest hands arrived in western Canada during 1906, an increase of 6,515 over those arriving the previous year. These excursions left eastern Canada on August 7, 14, 17, 22, 28 and 30, and on September 5, 7, 8, 10, 11 and 12.

CORRESPONDENCE.

During the period covered by this report we received 16,910 letters and sent 1,229 registered letters and 20,765 unregistered, besides many thousands of pamphlets, &c.

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HEALTH OF IMMIGRANTS.

I am pleased to be able to report the absence of any epidemic among new arrivals, and, generally speaking, the health of immigrants could not well be better. During the period covered by this report medical attendance was given in Winnipeg to 202 cases of sickness. There were several deaths in our hospital here; and during the period covered by this report 55 certificates were given recommending the deportation of undesirable immigrants. The value of the immigrant hospital in Winnipeg has been proved to the satisfaction of all concerned, and well justifies the small expense it entails. The plan we adopt is to remove at once to the general hospitals all cases that are likely to need lengthy or continuous treatment, or are of a contagious or infectious character, with the exception of measles, which is treated in an isolated portion of our own hospital, because the general hospitals will not receive measles cases. The care and attention thus afforded are much appreciated by the new arrivals. In addition to treating cases of minor sickness and holding over cases for diagnosis, the hospital has been used in order to care for those undesirable immigrants whose physical condition requires medical attention, and who are awaiting official instructions for their deportation. During the period covered by this report, 9 cases held for diagnosis disclosed: typhoid fever, 3; diphtheria, 2; scarlet fever, 1; constant micturition, 2; hemorrhage of lungs, 1; inflammation of knee, 1. Eighty-two patients have been treated and received 558 days' treatment.

The diseases or ailments treated were the following: Uterine hemorrhage, hemiplegia, rheumatism, deranged brain, collapse, mental trouble, whooping-cough, ulcer on the hip, diarrhoea, inflammation of the knee, varicose veins, gastroasthenia, anthritis, epilepsy, scalp wound, typhoid fever, ulcer of the leg, tonsilitis, scabies, aspiration after pleuro-pneumonia, cardiac weakness, weakness of lungs, obstetrical case, anemia, inflammatory rheumatism, gastricism, parotitis, burns on feet, frozen feet, frozen fingers, measles, constant micturition, tubercular leg, ulcer on foot, rupture of umbilicus, pleurisy, convulsions, stomatitis, locomotor-ataxia, rheumatic tonsilitis, inflammation of eye and face, bronchitis, non-granulation after amputation of toe.

TRAVELLING IMMIGRATION AGENTS.

Than these no members of the public service require or exercise more courtesy, tact and fidelity to duty. To our travelling agents is largely entrusted the scrutiny of 'excluded' immigrants, besides the duty of personally advising and assisting newcomers by railway.

DISTRICT REPORTS.

Brandon, Manitoba.

The number of immigrants who found accommodation in the Brandon immigration building since July 1, 1906, was 385, which does not include a large number who visited the office from day to day in the transaction of their business with the department. The closing of the building during removal to a new site reduced the total number receiving shelter. The new arrivals have proven to be satisfactory, and there is little, if any, discontent amongst those who have arrived in this district. At present farm help seems scarce; wages are much higher than last season, but owing to the large amount of railway construction which is proceeding, it is not easy to supply all the demands made on the Brandon office. The wages of artisans will be about the same as the previous year, with a possible upward tendency. Carpenters are getting from 35 cents to 40 cents an hour; stone masons 50 cents to 55 cents; plasterers 50 cents per hour, and general labourers from \$2 to \$2.50 a day. The land under cultivation in the Brandon district will exceed 65,000 acres. The harvest and fall of 1906 were dry; threshing was completed early in the season, permitting much fall ploughing before the frost came, and it is anticipated the crop for 1907 will be successfully sown in good time.

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Virден, Manitoba.

The town of Virден has been a very important distributing point for labour during the past year, and although all the men placed with farmers did not actually arrive at Virден, they were distributed and directed from that point as a centre, throughout what is known as the Virден district. The total number placed at work was 1,452; consisting of 825 old country immigrants; 500 Ontario harvest hands; 92 men on railroad work, and 35 in connection with the brick yard. An abundant harvest seems to have been the lot of this district. The Canadian Pacific Railway shipped 356,000 bushels, and the Canadian Northern Railway 216,400 bushels, still leaving in the farmers' hands 150,600 bushels of grain. There were also exported from this point 35 cars of cattle; 28 cars of hogs, and 129 cars of brick. Thirteen cars of settlers' effects were unloaded at this point, and taken altogether, the conditions of the Virден district are eminently satisfactory to all concerned.

Regina, Saskatchewan.

Seven hundred and eighty-eight immigrants received 2,247 days' accommodation in the immigration building at this point. These new arrivals consisted of the following: British 332, Germans 263, Canadians 25, French 24, Bohemians 9, Hollanders 4, Danes 3, Norwegians 23, Persians 19, Galicians 15, Roumanians 10, Hungarians 8, Swedes 3; 60 per cent were farmers; 20 per cent labourers, the balance mechanics and tradesmen. The district of Regina having passed from the immigrant or settlement class, does not receive many cars of settlers' effects, and only 11 cars were unloaded at this point. The area under crop is 25 per cent greater than the previous year. There is a scarcity of farm labour in this district which our agent finds it impossible to fill at the time of this report, with the indication, on account of largely increased area under crop, that the necessity for outside help will become more stringent from year to year.

Moosejaw, Saskatchewan.

The area under cultivation in this district is estimated to be 55,000 acres, as against 50,000 the previous year. A large number of harvest hands will be required in 1907. During the past immigration season 250 people received accommodation in the immigration hall at this point. This district, including the city of Moosejaw, appears to be enjoying a period of activity and splendid prosperity. Since the formation of the new land district it is confidently hoped that the development of the past will be greatly exceeded by that of the coming year.

Herbert, Saskatchewan.

This new settlement made good progress. A large number of settlers came in last fall. Last year's crop was good, wheat yielding from 25 to 30 bushels per acre. In some places frost did a little harm. The rainfall was abundant, but did not keep on sufficiently long to help the later grains. The winter was hard, but there have been few cases where the new settlers needed assistance. Some of them will, however, require an advance from the government in the way of seed grain. The demand for homesteads and lands for sale is increasing all the while. Eight new school districts have been organized, and several more are in process of incorporation.

Swift Current, Saskatchewan.

This district being a new one in respect to general farming operations, it is impossible to estimate with accuracy the acreage under crop, but a fair estimate would

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be 5,500 acres under grain; 57,000 bushels of wheat and 300 bushels of flax were sent from this point by one of the grain buyers, but the bulk of the crop was retained for seed purposes. Possibly 300 cars of settlers' effects came into this district, and the number of arrivals at all points on the main line which are tributary to this sub-land agency exceeded 3,000 adult settlers during the period covered by this report. It is the opinion of those who have settled that the district will prove a good one for mixed farming. The large cattlemen are practically out of business as a consequence of the inflow of homesteaders. There is a large area of unsettled land north and south of Swift Current, readily reached from this station. Perhaps the experience of Mr. D. of Swift Current is the best evidence of what this district is capable of doing. He says as follows:—

'I came here three years ago this month and have farmed every season. I had no previous experience in prairie farming, and had limited means. The first year I sowed oats on the sod and ploughed them under very early; result nothing. The second year I sowed the same ground to Red Fye wheat and got 29 bushels per acre. I also broke some sod four inches deep, and sowed flax, which yielded 12 bushels per acre. The third year I drilled wheat in the stubble and got 25 bushels per acre. I have been over the country from the White Mud river to the Saskatchewan river and examined the soil, and I consider it a first-class farming district.'

Maple Creek, Saskatchewan.

All new arrivals have expressed their satisfaction with this district, and those arriving during the fall of 1906 are preparing vigorously to farm extensively in 1907. Although this district has always been considered a ranching country, those farmers who have gone into grain raising have made a success, and shown that farming can be made as successful as in other parts of western Canada. From threshers' reports, 60,000 bushels of grain were produced, and as much more cut green and fed in the sheaf. The acreage under crop in 1907 will be double that of the previous year. Notwithstanding the heavy snowfall of the winter, no suffering has been experienced among the ranchers in the Cypress hills, and their losses now appear to be no higher than average, but unfortunately, this satisfactory condition will not hold in the north part of this district, where it is feared the loss among the cattle will be heavy.

Medicine Hat, Alberta.

Homestead entries through this office largely exceed those of any previous year; settlements are spreading widely and to great distances all around Medicine Hat and other immediate points on the railway. The class of settlers is excellent, and they appear to be contented with the conditions that exist, notwithstanding the severity of the winter, which is now shown to have been less disastrous than at one time anticipated. The farmers of the district are turning their attention gradually towards the raising of grain, and 37 cars of wheat were shipped in the fall of 1906 from Irvine station, besides the supply necessary for the local market in Medicine Hat. Medicine Hat continues to increase in size and importance. Land values are showing an upward tendency, and with an up-to-date water system, and unlimited natural gas for lighting and fuel purposes, this town is maintaining its favoured position. The estimated crop of this district is as follows:—

	Acres.	Bushels.	Average.
Spring wheat.	7,725	144,194	18.6
Winter wheat.	6	104	17.3
Oats.	4,968	148,888	29.9
Barley.	954	23,202	24.3
Flax.	81	649	8.0
Rye.	14	237	16.9

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Calgary, Alberta.

The immigration passing through and into this district is much larger than any previous year, and no difficulty has been found in placing at work those who arrived. Farm property has advanced from 30 per cent to 40 per cent in value. The report that thousands of cattle perished of cold and starvation in the Calgary district is without foundation. Six hundred and eighty immigrants received 2,123 days' accommodation during the nine months covered by this report. Fifty-three cars of settlers' effects were unloaded at Calgary. Eighteen creameries were operated in the district, producing over 1,000,000 pounds of butter, a larger record than any previous year. On the whole the crop in Southern Alberta was good; the quality of the grain excellent, and it is estimated that the area under winter wheat is 75 per cent higher than the previous year. Barley and oats realized a first-class crop. The general acreage in crop for 1907 will be double that of the previous year, and farmers appear to realize the importance of making better preparation of their land. Heavy draft horses are worth \$375 per span; ordinary driving horses from \$150 to \$200. Experienced farm hands can be placed in this district immediately. The city of Calgary itself is progressing beyond all expectation, and nearly two and a half million dollars worth of buildings were added to the permanent improvements during 1906.

Kamloops, B.C.

The number of arrivals exceeds that of any previous year. Eleven cars of settlers' effects were unloaded at this point, and the same number at Salmon Arm. There is a steady demand for labourers on farms, railways and in the timber camps.

New Westminster, B.C.

The same number of homesteads were taken as in the preceding period. There appears to be a growing tendency among a large number of farmers east of the Rocky mountains to purchase land on the Pacific coast for winter residences.

Carstairs, Alberta.

During the past nine months this district has been favoured with much prosperity; many new and substantial buildings have been erected, including business blocks in the town. The farmers in the district are taking advantage of the opportunity to ship direct to the terminal elevators, thus saving the profit of the middlemen, and it is expected an 80,000-bushel elevator will be erected this summer at this point. There are still some homesteads west of Carstairs, but these are being taken up very rapidly. The value of land has increased and now ranges from \$7 per acre for wild land, to \$50 per acre for improved farms. Every farmer has planned a large amount of breaking for this spring; many large contracts have already been let, some covering as much as 2,000 acres each. The class of immigrants arriving consists of the most progressive Canadian and American type, who have disposed of their property in their old homes for large figures and can well afford to buy the best farms in the neighbourhood. It is expected there will be a shortage of labour, as the present demand for farm labourers and carpenters cannot be supplied. The general outlook is one of prosperity.

Olds, Alberta.

The official returns for this district not being available, it is impossible to give an adequate or correct statement as to the result of the last year's farm operations. This is becoming a popular shipping point for farmers, and during the last season

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50,000 bushels of oats; 2,000 tons timothy hay; 2,200 tons prairie hay; 42 cars of cattle; 10 cars of hogs, and 3 cars of horses were sent out.

Red Deer, Alberta.

The Red Deer district has made wonderful progress during the nine months covered by this report. Throughout the depth of the winter, however, the entire absence of wind or storms, permitted the continuance of outdoor work without losing a day on account of the weather, nor was there any inconvenience or suffering by lack of fuel. The loss of cattle which was reported to be serious does not appear to be above the average. Coal mining for domestic purposes has been extensively carried on during the past winter. Farm products and farm lands have been increasing in value during the past year, and many new settlers prefer to purchase improved lands near the towns rather than take up homesteads a distance from a railway.

Lacombe, Alberta.

Through this office 106 applications for homesteads were made, being a marked decrease from previous years caused by the scarcity of available homesteads near the railway. During the past year the acreage under crop has been largely increased and the general result last year was good. The present prospect is excellent for a crop of fall grain. Good available homesteads can be obtained in the Medicine valley and between Medicine river and Saskatchewan river, a distance of forty to seventy-five miles west of Lacombe. There is a scarcity of farm labour in this district, and those experienced, or partly experienced, could obtain steady employment here. During the past winter a few of the settlers found the climatic conditions too severe, and moved to British Columbia. With this exception all appear to be satisfied with their condition.

Stettler, Alberta.

The number of new arrivals was very large, composed of American farmers, with a fair proportion of English, Scotch, French and German. The arrivals during the past three months of 1907 have been very few, owing to the prevailing winter season. During the past nine months 473 cars of settlers' effects and stock were unloaded at this point, and 84 cars of stock have been exported. Since May 7, 1906, to date, 759 homesteads have been taken out at this sub-land office. The acreage under cultivation has doubled during the past year. Farm help is required during hay time and harvest, and it is reported that 160 carloads of settlers' effects are already on their way from the States to Stettler.

Ponoka, Alberta.

During the months of July, August and September, 1906, the demand for Dominion lands in this district showed remarkable activity, and a substantial increase was also noticeable in the price of lands for sale. A gratifying feature of all this was that the investments were largely made by actual settlers. Settlers came from the middle western States, Germany, or eastern Canada, with a few Scandinavians and English. The district is now settled as far east as the west boundary of Saskatchewan, and 35 or 40 miles to the west of Ponoka. Two government creameries are in operation, receiving enthusiastic support from the farmers, and giving highly satisfactory results, the butter produced being the very finest, and securing a ready market in British Columbia and the Yukon. In Ponoka Mr. W. A. Brodie established a creamery in 1904. In the year 1906 he made 115,000 pounds butter, using milk from 1,100 cows. This produced returns to the farmers from 16 cents to 20 cents per pound.

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The Berrybank creamery, 12 miles west from Ponoka, manufactured 55,000 pounds; the Earlville creamery, 18 miles to the east, manufactured 90,000 pounds. All these facts and figures prove that Ponoka district, in addition to growing grain in quality from fair to the best, is eminently fitted for successful dairy business. There was shipped from Ponoka during the past year a large amount of dressed poultry, and 30,000 eggs. One settler, a Canadian named W. R. Miller, living six miles east of Ponoka, appears to be able to handle cattle raising with great profit. Last year he placed in his feed-yard a carload of steers for winter feeding. These cost him on an average \$32 per head, and recently he sold them all out at \$65 per head. There are now 20 well organized, well patronized schools in this locality. The settlers now arriving in this district will secure the advantages of the roads and bridges which the pioneers did not have. Winter and spring wheat are growing here with good results, and last year's increase in area amounted to 25 per cent. Seventy-five cars of produce, consisting of grain, hogs, cattle, brick, &c., were shipped from Ponoka. There is some demand for farm help of the right class. It is pointed out that 30 miles west of Ponoka will furnish good homestead lands particularly well adapted for mixed farming, especially cattle and stock raising. These lands are well watered, plenty of timber and abundance of feed.

Millet, Alberta.

The land guide at Millet reports that about 50 immigrants arrived at this point during the period covered by this report, and were mostly American immigrants, having 25 or 30 cars of effects. In the immediate vicinity of Millet 2,700 acres are under crop. There is a steady demand for labourers this spring, but there appears a grave necessity for a wagon road west from Pigeon Lake some 10 or 15 miles.

Telfordville, Alberta.

Forty carloads of settlers' effects arrived at Leduc, which is the nearest station to this post office, and a large proportion of these went into the Telfordville district. This being a newly opened portion of the province of Alberta, the acreage under crop does not exceed 300 acres.

Strathcona, Alberta.

During the period covered by this report 2,451 immigrants arrived at this point, bringing 90 cars of effects. The homestead land in the immediate vicinity is well taken up, but Strathcona continues to be a point where a good many settlers leave the railway for a large area of country around. Settlers arriving this year have been better supplied with means than formerly, and a pleasing feature is the return of a large percentage of those who left Canada for the United States some two or three years ago. Coal and wood being plentiful in this district there was no suffering among any of the settlers. The crops during the past year were very good. A large quantity of new land was broken for the season of 1907. The present indications are that there may be a shortage of labour. Towns are growing very fast and municipal improvements are so heavy, that many intending to work on farms secure more ready employment in the towns.

Edmonton, Alberta.

The steady and increasing number of immigrants which has been characteristic of the movement into this district has continued during the past year to the full extent of the most sanguine expectations. The new arrivals are of a class that would be hard to improve upon, and this is all the more remarkable considering that they

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come from all parts of the United States, Great Britain, Australia, South Africa, and continental Europe. Complaints, or discontent have been few and far between, and although the past winter has been exceptionally severe and long, only two or three cases have required any assistance in the way of provisions, and in some of these the families were reduced to need by periods of long illness, or by death of those who were supplying the family with the necessaries of life. There is a large quantity of land west, and northwest of Edmonton, that should be subdivided and opened for entry at once, as a number of settlers are going in there and carrying out improvements on lands as if they had homestead entry for the land. Notwithstanding the desire of the department to discourage at the present time any movement towards the Peace river, a large number of Americans have gone up there, which is to be regretted from some standpoints, as the country is far distant from any railway. The harvest last year was good; wheat ranging from 25 to 30 bushels per acre; oats 50 to 75, and barley 35 to 40. The acreage under cultivation was 30 per cent more than the previous year; and it is safe to say that the farmers throughout this district are prospering. The Galician farmer appears to have taken his settled place in this district with very commendable success, and some of the oldest of these settlers threshed from 5,000 to 10,000 bushels of grain last year. These special results, and a general survey of their settlement would form a surprising instance of what success attends the diligent worker on land in western Canada, even though his capital be represented by almost nothing. It is expected that farm labour will be required in this district some part of this year. There will be plenty of employment for carpenters, bricklayers and other tradesmen; also for good coal miners, and, of course, domestic help is in continual demand. The immigration buildings at this point have been found altogether too small for the accommodation of those desiring the use of same, and at the time of making this report we are about to open a new permanent structure, and also adding as an extra precaution, a temporary immigration shed 40 x 70. The number of people that received accommodation in the immigration halls during the period covered by this report was 1,428, and they received 9,704 days' accommodation. Four thousand eight hundred and thirty-seven persons called at our immigration office, or communicated direct with the agent in connection with the business of the department. It is estimated that 16,380 settlers arrived in this district, bringing with them 100 cars of settlers' effects valued at \$140,000. Settlers looking for open prairie should no longer be directed towards the Edmonton district, as what prairie land is left will fill up rapidly, and in any event would take time to locate. There are many townships lying about Edmonton (except S.E.) which are partially wooded and suitable for settlement; soil good; water, wood and coal plentiful, and settlers who prefer those conditions could, with advantage, be directed to Edmonton.

Innisfail, Alberta.

A very satisfactory number of immigrants arrived in this district. Practically all the land for a reasonable distance east and west has been entered for. In most cases the new arrivals went into immediate residence. Twenty-eight cars of settlers' effects from the States, and 24 cars from Canadian points were unloaded here. The crop of 1906 was very good, and a largely increased area was sown. Several large fields of oats yielded over 100 bushels per acre. As most farmers were prepared to feed their cattle, there were few lost during the winter. There is a demand for farm labourers, there not being sufficient for the work of 1906.

Edison, Alberta.

Sixty homesteads were taken up through this office during the period covered by this report. A very large number of homesteads have been taken up in townships 58,

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59 and 60, ranges 1, 2 and 3 west of the 5th meridian, and indications are the number will be largely increased this year. The older settlers have only been four years in the district, but they have from 10 to 100 acres all ready for crop this year. A few farm labourers may find work, but not many are needed.

Fort Saskatchewan, Alberta.

Over 1,000 homestead entries were made through this office. The amount of grain shipped from this station consisted of 200,000 bushels of oats; 125,000 bushels of wheat; 7,500 bushels of barley, and there is still 25 per cent of crop in the farmers' hands. Eight cars of settlers' effects were unloaded here. Tributary to this point are a large number of Galician farmers whose progress is very satisfactory, and they furnish ample farm help for the farmers in this district. A striking feature connected with these people is that although the past winter was severe, they had provided themselves with all necessities, and no case of want has been reported. It is estimated that 25,000 acres will be under crop in the immediate district this year.

Wostok, Alberta.

Sixty-seven new families arrived in this district from Galicia. Twelve per cent of the area occupied by these farmers is under cultivation. There is no demand for farm labour at this point.

Whitford, Alberta.

A very large number of new settlers, mostly from Austria, arrived during 1906, but those coming subsequent to the close of 1906 are mostly Canadians from Ontario. One hundred and thirteen homestead entries were made at this office, and 100 patents were taken out, plainly showing that the settlers in this district have progressed and become permanent farmers, and also indicating that the homesteads available for entry are few and far between. The acreage under crop for 1907 will be much larger than the previous year. Farm labour wages are higher than formerly. The past winter was unusually severe, but this agent reports no loss of stock, or otherwise.

Lethbridge, Alberta.

Inasmuch as the fiscal year is now closing before reports can be had from the stock raisers, it is hardly possible to give an accurate statement of the condition of affairs in this locality. Notwithstanding the adverse weather conditions, the number of immigrants in January, 1907, exceeded those of the corresponding month in the previous year. The total number of arrivals for the nine months ending with the date of this report, is 1,746, which shows a small decrease when compared with the same period of the previous year. Over 780 of these men were farmers or ranchers, not counting women or children, or farm hands. Besides property brought in by trail, 53 carloads came in by way of Coutts, and 108 by the Canadian Pacific Railway. The value of stock and effects would not be less than \$750,000, and the new arrivals, almost without exception, were a markedly good class. The dry spell of 1905 in Southern Alberta, the United States scheme of irrigation, and the opening up of Indian reserves south of the boundary would be quite sufficient to account for decrease in immigration from the mountain States in recent years. Judging from remarks made by these new arrivals, the American press and financial institutions are again becoming hostile, as the loss of so many good farmers is felt. On the other hand, American speculative companies have bought extensively in Southern Alberta, with the declared purpose of settling them with actual farmers, and some influx may be

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looked for from this source. The government of Alberta province has not yet completed its reports, consequently exact figures cannot be given, but in some parts of this district grain is still lying out unthreshed through lack of labour during the fall of 1906, and owing to the lack of rain thus far the farmers may be able to save the whole of this grain in the stook. The Lethbridge Board of Trade claim that the crop in the district consisted of 14,000 acres spring wheat; 5,000 acres winter wheat; 12,000 acres oats, 1,000 acres of barley, and 400 acres of flax, but official figures are not available. The total amount of sugar beets used by the Knight Sugar Company at Raymond, and grown in this district, amounted to 18,295 tons. It is generally conceded that if the weather which was prevalent in January had continued throughout February, the ranch cattle industry would have been practically wiped out. It is now admitted that the ranch cattle industry is doomed by the advancing tide of immigration whereby thousands of people will live where only a few lived before. The following figures of the shipment of live stock will prove interesting:—

	Horses.	Cattle.	Sheep.	Hogs.
1906..	19,549	114,651	57,024	30,099
1905..	12,882	83,405	40,810	24,435
	<hr/>	<hr/>	<hr/>	<hr/>
Increase..	6,667	31,246	16,214	5,664

There is an extraordinary demand for horses suitable for farm work, which is the natural result of the taking up of new lands in Alberta and Saskatchewan. The fact that the sheep industry is not in as flourishing a condition as is desirable, can be accounted for on several different grounds; the great disparity in the price of wool, and the increased movement to settle up the ranges, make it evident to sheep growers that the prices will not be so good as in former years.

One of the striking instances of the march of the settler is the sale of the Cochrane ranch, which comprises 66,000 acres, and will this year be very largely occupied by farmers. The demand for labour in this office has been so great that all labour was absorbed as it arrived. Bricklayers and masons are receiving 72½ cents an hour; carpenters 45 cents; plasterers 50 cents, and general labourers 27½ cents. Rough lumber is \$25 per thousand, and No. 1 clear siding \$38 per thousand, a considerable advance on the prices of a year ago. A site for an experimental farm has been bought four miles from the city of Lethbridge, and it is fully expected will be a great advantage in disclosing the capabilities of Southern Alberta. Notwithstanding the general favour of irrigated lands, the great bulk of the new settlement is going on non-irrigable lands, and good crops are being obtained thereon from time to time. There appears to be a growing belief that 'dry farming' may make irrigation unnecessary altogether, and through widespread cultivation, not only retain but attract precipitation. The soil this spring is in excellent shape so far as moisture goes; the lakes and ponds are flooded and the mountains full of snow. One thousand four hundred and eighteen homestead entries were granted in the land office here, as against 1,181 for the corresponding previous year. The bulk of lands which now appear to be vacant are in the district north of the Little Bow river, in township 14, range 19, and in the district east of Tabor, townships 9 and 10 from range 14 easterly. During the period covered by the report 159 persons received 2,501 days' accommodation in the immigration hall at this point. There passed Customs at Coutts 155 cars of effects, at a specified value of \$90,000. The particular locality tributary to Coutts is used entirely for stock raising purposes. The past season was very dry and irrigation is necessary before that part of Southern Alberta can be considered fit for grain raising; in fact, hay, oats, and even chicken-feed had to be brought into Coutts for the purposes of those living there.

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Pincher Creek, Alberta.

The fall wheat in this district has started, and no case of failure is yet reported. The whole district has an abundant supply of moisture, insuring early pasturage and a good crop of hay. The stock being now mostly held by farmers was looked after and fed, and received more attention than if the winter had been finer. No great loss has yet been reported even among the few range herds running in the vicinity, but the final results cannot be shown until the expiration of at least two months. The only complaint our settlers make in this district is the low prices they are receiving for cattle which will inevitably result in their going out of that branch of business. The land being now well occupied, there is not a great stream of settlers to this district, but those coming are looking for homes, and partially improved farms, or attempting to cancel the existing homestead entries. During the period covered by this report 124 homesteads were made through this office.

High River, Alberta.

The severe winter caused some loss among the cattlemen, and although the snow-fall was heavy, the absence of stormy weather prevented, what appeared at first sight, likely to be a disaster. The farmers appear to be in good humour over the prospects for fall wheat. Very little homestead land is now available in this district, and the settlers, generally, are progressing satisfactorily.

Sedgwick, Alberta.

This point has only just been opened up by railway communication, and will be on the short line from Winnipeg to Edmonton. A number of cattle, unfortunately, died during the past winter from lack of feed, but beyond this feature no complaints are heard among the settlers. The immigrants arriving are a well-to-do class. There is little land under cultivation. The railway construction now proceeding upon this branch of the Canadian Pacific Railway, and also on the main line of the Grand Trunk Pacific Railway will materially increase the advantages of this district, and there will be no trouble in securing a market for all farmer's produce. Already ten carloads of settlers' effects have been unloaded at this point. At the time of making this report farm hands seem to be in demand, but this is likely to be met by the incoming arrivals.

'Soo' Line between Moosejaw and North Portal.

Travelling agents state that during the time covered by this report many settlers, with their effects, have passed into Canada by way of North Portal. The immigrants themselves are very desirable, and they bring with them an ample supply of capital and energy. The value of the settlers' outfits these American families bring is not less than \$1,000 a family, and often as high as \$8,000, besides money. From North Portal to Moosejaw there is plain evidence of prosperity; what was a few years ago a treeless prairie without a habitation, is now so closely settled that the farmers are erecting newer and larger farm buildings, and very largely increasing their area under cultivation. All the towns on the line of the railway are increasing in size and importance, plainly indicating that the settlers are there to stay. The railway company has erected new stations at Drinkwater, Lang, Midale and McTaggart. Ten new elevators were built last fall. The city of Moosejaw is progressing very rapidly, and the cost of new buildings and public improvements exceeds \$1,000,000 for the past year. The new land district of Moosejaw, and the agent's office at Moosejaw itself will prove to be of great advantage to the district west of the city. There is a good

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demand for labour of all classes along this line, and as the acreage under crop is nearly one-third more than any previous year, harvest hands will be needed.

Milestone, Saskatchewan.

The immigration to this point appears to be equally divided between those from the United States and those from eastern Canada and over the seas. Two hundred and thirty-six cars of settlers' effects were unloaded at Milestone station, some coming from as far east as Nova Scotia and Massachusetts, and as far south as Kentucky; but the majority came from Iowa, Illinois, Minnesota and North Dakota. The area of settlement now reaches township 5 to the south, and Willow Bunch to the southwest. The area under cultivation doubled during the past year, and will probably double again during 1907. In the season of 1905-6, 211,000 bushels of wheat, 170,000 bushels of oats, and 119,000 bushels of flax were shipped from Milestone station. Flax sown on spring breaking yielded from 9 to 25 bushels per acre, and is worth \$1.13½ per bushel on track at Milestone. The experience of steam-ploughmen was unsatisfactory, owing to the wet spring of 1906. Engines could not travel, and the loss in wages rendered the ventures unprofitable then, but the work performed during the dry season was satisfactory to all concerned. There is a considerable area of hilly land beginning in township 9, range 21, and extending to township 12, range 24, west of the 3rd principal meridian, which is not being taken up because it is largely unsuitable for grain growing, and it is suggested that some continental immigrants be directed to that portion of the district.

Estevan, Saskatchewan.

This district covers a portion of what was known as the Alameda land district. The crop last season was excellent, the average yield of wheat being 22 bushels, but much of the wheat still remains in the hands of the farmers, or in the elevators, as the railroad has not been able to move it out. The southern part of the district is favourably situated, there being an abundance of coal at Estevan, Bienfait, and Moose mountain is yet able to supply a considerable quantity of wood for the surrounding districts. There were several alarming reports of destitution and distress from two or three points in this district, but they were found, upon investigation by special patrols of the Northwest Mounted Police, to be in some cases without foundation, and in others, not so serious as reported, and since the weather has moderated, it is quite evident that the farmers are just as hopeful as ever, and at least one-third more land will be brought under crop in 1907 than was cropped in 1906. There is a very noticeable increase in the number of settlers from Great Britain, but the majority of settlers coming into this district are Americans and Canadians.

Craik, Saskatchewan.

Sixty-four cars of settlers' effects arrived at this point. The total acreage in what is known as the Craik district during 1906 was as follows: wheat 12,545 acres, average 24 bushels; oats 4,658 acres, average 36 bushels; barley 222 acres, average 28 bushels; flax 2,241 acres, average 7 bushels, being a total of 19,666 acres, which acreage will be increased for the crop of 1907 to 26,500 acres. There is no demand for farm labour here which cannot be supplied readily from the newcomers.

Kenaston, Saskatchewan.

The district immediately contiguous to Kenaston is very fully settled. There is a good settlement of Slovaks. Seventy-eight cars of settlers' effects were unloaded at
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this point. The area under cultivation in the nearby townships in this district will average from 3,000 to 8,000 acres, and there is demand for farm help at good wages.

Saskatoon, Saskatchewan.

Notwithstanding the backward season 40 cars of settlers' effects were unloaded in the month of March, 1907. About 4,000 people received accommodation during the past nine months at the immigration hall. Most of the homesteads within reasonable distances are taken and many go 150 miles west for good lands, whereas four years ago good homesteads could be had a few miles from Saskatoon. The crop during this year will be double that of the previous year, and this amount would be still further increased if the railways could take care of the products. The average wheat crop realized 20 to 45 bushels; oats 40 to 80 bushels. The farmers appear to be prosperous, and land has increased rapidly in price. Unimproved lands sell at \$15 to \$25 per acre. This will be a district of large wheat farms, as in many cases whole sections are being broken up by steam ploughs.

Rosthern, Saskatchewan.

Seven hundred immigrants arrived at this point, with 125 carloads of settlers' effects; of the arrivals 200 were Galicians, the remainder being British and American. It is reported that not more than half the crop of 1906 has so far been marketed, and it is expected that at least 1,000,000 bushels of 1906 wheat will be put through the Rosthern elevators. The crop area will be 25 per cent greater than the previous year. The district is especially favourable for the production of wheat; one farmer named Lorenz Samletski raised 2,423 bushels of No. 1 hard wheat off 36 acres of land, being an average of 52½ bushels to the acre. There is some slight demand for labour in this district.

Duck Lake, Saskatchewan.

The homesteads in this district having been for the most part occupied, or taken up, our building has not been used to much purpose during the past year, and were it not for the fact that a number of the homesteaders in this district are expecting friends from the old countries, who are without means, it would not seem advisable to keep this building open beyond the season of 1907. The acreage under cultivation increases year by year, and prosperity is general. It is a pleasing feature to note that only a small percentage of the farms in this district are mortgaged. The added acreage under crop, and the fact that the homesteader is now obliged to attend to his own farm, will probably mean the need of a number of extra farm hands from now on. Sixty-two applications for homesteads were made at this office during the past year.

Prince Albert, Saskatchewan.

Two hundred and sixty-seven actual settlers arrived, consisting of 77 English, 57 Norwegians, 2 Belgians, 23 French, 52 Americans, 14 Scotch, 2 Irish, 2 Polanders, 10 Russians, 6 eastern Canadians, 22 Germans. Fifty-one cars of effects were unloaded by these very desirable settlers. There is a demand for farm hands, and the indications show that considerable farm help will be required in harvest time. The fishing and lumbering interests north of Prince Albert have furnished employment to over 2,000 men during the past winter, and at least 500 men will be required by the mills operating throughout the summer months. The new Canadian Northern Railway bridge across the Saskatchewan river to this point, and the extension of the road beyond to Battleford will furnish employment to a large number of men, and new

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arrivals should have no difficulty in getting work. It is expected the erection of the new immigration building and the recent appointment of a special immigration agent will materially aid in the settlement of this district. Last season's crop was considered the best in the history of the district, but fully one-quarter is still unthreshed, and a similar amount still remains in the hands of the farmers. A steady advance in the value of city and farm properties is noticed. One thousand one hundred and ninety homesteads were entered for during this period.

Lipton, Saskatchewan.

Our agent reports the district flourishing and prosperous. Four or five times the area of the previous year will be under cultivation during 1907. At this point there was marketed, in the winter of 1905-6, 80,000 bushels of wheat; during the winter of 1906-7 twice that amount was exported, and there yet remains a large quantity in the farmers' granaries. This district appears to be well suited for grain raising, and one, if not more, of the farmers will be using a steam plough. In the Loon Creek district to the north of Lipton 5 or 6 steam ploughing outfits will be at work this year. Reporting by districts in this sub-agency, it is found that the area under cultivation in 1907 will be as follows: Hayward 3,000 acres, Lipton 5,000 acres, Dysart 4,000 acres, Kronsburg 6,000 acres, Headlands 1,500 acres, Benchonzie 1,000 acres, Touchwood Hills 1,500 acres. Five hundred and seventy-three homesteads were granted during the period covered by this report. No case of suffering from shortage of fuel or otherwise has been reported.

Dubuc, Saskatchewan.

The country surrounding Dubuc is well adapted for mixed farming, and settled chiefly by English-speaking people, Canadians and a number of Scandinavian-Americans. Homesteads have all been taken, but there is still considerable buying and selling of odd-numbered sections, and the prices have advanced during the last four years fully one hundred per cent. The area under cultivation in 1907 will be 40 per cent greater than the previous year. It is expected there will be a demand for farm labourers to a limited extent for spring work, but more help needed for the harvest.

Redvers, Saskatchewan.

About 300,000 bushels of wheat were grown in the immediate territory tributary to Redvers, of which only two-thirds has been marketed so far. Notwithstanding the difficulty of marketing wheat, and obtaining fuel and supplies, immigrants continue to arrive in fairly large numbers, and fully one-third more will be sown to wheat this season than any previous year. Farm help will be needed at this point.

Strassburg, Saskatchewan.

The new settlers arriving at this point have done a very large amount of breaking, but being a comparatively new district, reliable figures cannot be ascertained for this report. Some of the settlers augmented their financial resources by taking work on railway construction, while others found remunerative employment freighting Grand Trunk Pacific construction material north to the surveyed line of the railway. The majority of the new, and older settlers firmly believe in mixed farming, and while few have been fortunate enough to secure large herds of cattle, nearly every one has made a start in that direction, the hay land interspersing the wheat soil, making this feature of farming very desirable. The district produced many carloads of No. 1 hard, but oats have not yet received the attention they should, because all that have been grown

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are needed for feed purposes. The average production per acre was much below the general average of Saskatchewan owing to dry spells during the growing season; in some cases not more than 8 bushels per acre was harvested. There is no dearth of farm labour at this point, and although the acreage will be largely increased this year, the new homesteaders coming in will be able to supply the need.

Yorkton, Saskatchewan.

The total number of immigrants accommodated in the immigration hall was 364. Twenty-three cars of settlers' effects were unloaded at this point. The amount of grain received by the elevators was 1,390,000 bushels, and it is estimated that 50 per cent of the 1906 crop is still in the farmers' hands. The settlers in this district appear to have been generally successful, and no case of destitution has been reported during the past winter.

Kristnes, Saskatchewan.

So many arrivals reached this district during last year that practically all the homesteads are taken. They were mostly Icelanders and Swedes from North Dakota and Minnesota. Twenty carloads of effects were brought into the nearest railway stations, accompanied by between 200 and 300 settlers. The crop of 1906 was equal to the best as to quality and quantity; the average wheat yield being 27 bushels, oats 39, barley 30, flax 9 and speltz 21. There does not now appear to be any demand for farm labour, but the extension of the railway line may draw labour from the farms. At present settlers have to drive 15 or 20 miles to the nearest market, consequently they are hoping for the immediate construction of the railway to Saskatoon, which would bring them within 5 or 10 miles of a railway station. The average acreage under crop amongst the settlers in this district was 34 acres per farm, and this will be largely increased during the present year. Notwithstanding the usual vicissitudes of settlement in a new country, our agent reports the people well content.

Canmore, Saskatchewan.

One hundred families, with 20 cars of effects, arrived at this point. The settlers had a good crop last year. This point is becoming a grain centre, 350,000 bushels having been shipped by rail, and a large quantity is still in the farmers' hands. Some crops of wheat yielded 42 bushels to the acre, and oats 120 bushels. North of this point there are large American and Galician settlements, and up to the north boundary of township 36 is generally well settled. Quarter-sections of land with few improvements have been sold at prices ranging between \$2,000 and \$3,000. The Galicians who were amongst the first settlers in this district, are succeeding well, having secured good crops each year since they adopted the Canadian methods of farming. Some of these people arrived eight years ago, with large families and no money, and each has now a large acreage under crop, and many have bought land alongside of their homesteads, and it is gratifying to notice their distinct desire to have their children educated in the best Canadian schools.

Invermay, Saskatchewan.

Twenty cars of settlers' effects were unloaded at this point, accompanied by homesteaders with their families, nearly all of whom settled on homestead land. In this district there is a large quantity of scrub on the land, and this is holding back settlement somewhat; but once the land is cleared the soil is found to be of choice quality. Plenty of homesteads are yet available within ten miles of this station, and the settlers coming in are Americans and eastern Canadians.

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Kutawa, Saskatchewan.

The crop in this district was cut in first-class shape. Wheat averaged 25 bushels, oats 45 bushels, with some exceptionally large yields on special farms. There was no damage by hail or frost, but the very hot weather at ripening time probably reduced the yield by 5 bushels per acre. Garden stuff gave good returns. Cattle did remarkably well. Several new schools have been built and new post offices opened, and improvement districts have been organized for road work. There was no lack of fuel, nor any destitution among settlers in this district during the past winter. There is likely to be a demand for labour during the coming summer, as the railway companies will take a number of men otherwise available for agriculture; and with the construction of the railway, town sites will be put upon the market, making considerable work for artisans as well as labourers. Although much land is homesteaded, there are a number of homesteads in the park country within reasonable distances of the new railway lines now under construction.

Muenster, Saskatchewan.

The prospects for this district are reported good. The wheat crop of 1906 was good in quality and yield; oats and barley also produced well, considering most of it was on the spring ploughing. There is no demand for farm labour at this point. The settlers arriving were a good class, the majority coming from North Dakota, the eastern provinces, Minnesota and Michigan. Most were farmers and good workers. The general health has been excellent. Good water can be obtained at a general depth of 15 to 20 feet. It is estimated that the acreage under cultivation in 1907 will average 50 acres per homestead, and as all the homesteads are taken up, a large harvest may be expected. Oxen are gradually being disposed of and horses being purchased. The need of better roads is apparent and this district has suffered in common with many points owing to the defective railway service on the Canadian Northern Railway.

Quill Lake, Saskatchewan.

The settlers here are mostly English, Scotch and Canadian. South of Quill lake they consist of Americans, Icelanders and Norwegians. The immediately contiguous area to Quill lake will see about 6,000 acres in crop in 1907.

Battleford, Saskatchewan.

Throughout the year there has been a constant inflow of new settlers approximating 15,000 persons, the number of homesteads taken being 4,075. The class of settlers cannot well be surpassed, composed principally of Scotch, English, Irish, American and German nationalities. Most of the last mentioned before coming to Canada had been farming in the States, and speak good English; all the settlers who have been farming in the States bring effects with them, and 284 cars were unloaded at this point. The general trend of settlement during the year has been south and southwest of Battleford through which the Grand Trunk and Canadian Pacific railways are now being constructed. Fully seventy-five per cent of the new settlers were located along these lines, or along the proposed Canadian Pacific Railway line from Moosejaw to Lacombe. The crops in 1906 were harvested in good condition, the yield and quality being satisfactory. The acreage under crop in this district was 43,713 acres, the average acreage per farm being 35 acres. It is expected that at least 60,000 acres will be under crop this year. A number of new settlers will have to be assisted by the loan of seed grain in the spring of 1907. There is no demand for farm labourers, but carpenters, bricklayers and other tradesmen have little difficulty in securing

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work. Thousands of homesteads still to be had in the Battleford district are admirably suited for grain growing and mixed farming. The provincial government of Saskatchewan is expending \$30,000 in the building of roads, bridges, &c., in order to assist the settlement of the country.

North Battleford, Saskatchewan.

This season the district has experienced a wonderful growth in development and in the number of arrivals. Approximately 350 homesteads have been taken up within a semicircle of 50 miles radius to the north, which means about 1,000 arrivals and 200 cars of settlers' effects. The settlers are, generally speaking, industrious and thrifty. They are British, Icelanders, some from the continent of Europe, and others from the western States and provinces of eastern Canada. The acreage under crop in 1907 is expected to be at least three times greater than in 1906. There is no immediate call for farm labour, but mechanics in connection with the building trades can find ready employment in this and other towns along the Canadian Northern main line.

Lloydminster, Saskatchewan.

Report shows the past has been a very successful year, and the number of immigrants arriving has exceeded the previous year. The greater portion of settlers came direct from the old country, and a large number came from the United States, bringing with them 32 carloads of settlers' effects. The settlement has mostly gone south between the Canadian Northern line and the Grand Trunk Railway, but there are quite a few homesteads yet to be had within three miles of the last-mentioned location, and all along the line of construction business centres are springing up eight miles apart. One of the largest of these settlements is Denwood on section 21-44-6 west of 4th P.M., in the centre of a very fine stretch of agricultural land, but all homesteads are taken in this township. During the past winter the homestead inspector, and other officers, have been diligently engaged in patrolling the district for long distances, in order to keep in touch with settlers and see that no misfortune overtook them, which could not be readily met. Only three cases of destitution were discovered; one being a family who arrived after the snow had fallen and were not in shape to start operations at that time of the year; another case was a family of nine from South Africa, who arrived late in September, too late to make adequate preparations; the third case being that of a woman with six children, who were located on a homestead south of Vermilion, her husband having left in the fall to secure work, and has not since been heard of. There were no advances of seed grain during the year, but it is possible that assistance in this line will have to be given in some cases during the spring of 1907. A pleasing feature is the correspondence kept up by the original settlers with those in the old land whom they may desire to bring out. The fourth meridian line which passes through Lloydminster has been graded by the government of Alberta, and a steel bridge has been constructed across the Battle river, a great convenience to the settlers in all the south country. The road is 30 miles long and goes through a fine farming district, and it is intended to continue the same northward to the Saskatchewan river, thus making a trunk-road on the meridian line 55 miles long. The action of the Department of Agriculture in having field contests for the growing of wheat, has been of much benefit to farmers, and since the visit of the seed grain special train a year ago, much more care is taken in farming operations. There are many hundreds of homesteads to be had in large districts which can be readily reached from Lloydminster and other points on the railway. Accommodation was furnished in the immigration building at this point as follows:—

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July, 1906..	50 persons.
August..	32 "
September..	39 "
October..	22 "
November..	13 "
December..	7 "
January, 1907..	8 "
February..	15 "
March..	42 "

So far there were no cases of sickness in our building, although a few mild cases of scarlet fever developed in the town. The class of settlers has been exceptionally good. Thirty carloads of effects were unloaded.

Vermilion, Saskatchewan.

The immigration has been very large not only to the country surrounding, but in the town itself. What was practically a wilderness two years ago, and one year ago sparsely settled, is now a thickly peopled district of Canadian, British and American farmers. Many labourers and mechanics got a start on their homesteads by employing their spare time in labouring in the town of Vermilion. This town, although only fifteen months old, has a population of 1,300 souls, and there is tributary to the north a very large amount of fertile lands. The organization of local improvement districts is being completed. The settlers are a progressive and enterprising type, and schools are being erected in every district. The favourable conditions existing here with respect to abundance of fuel, and feed for stock, have prevented anything like distress among the settlers who came in without an opportunity of preparing for winter. From this point a charter has been granted to construct a railway northward into the Cold Lake district, which will open up a very large territory of very good land for settlement. The acreage under crop in the immediate district is expected to be 15,000 acres. The provincial government has established a creamery for this town, and its success is assured owing to the abundance of good pasture and good water.

Vegreville, Saskatchewan.

Forty-two carloads of settlers' effects arrived here. It is estimated between 500 and 1,200 settlers arrived in the district, many of them taking up homesteads. The settlers are a good class, mostly Canadians and Americans, or those born in foreign countries who have lived in the United States for years. A few Galicians arrived. The acreage under crop is increasing very fast, and fully 50 per cent more land was under cultivation than was cropped the previous year. Steam ploughs are in operation in this district. There is no shortage of farm labour. Two hundred and thirty homesteads were entered for at this sub-agency.

Teulon, Manitoba.

The settlers in the district north of this point consist largely of Galicians, French, Germans and Hebrews. The newcomers and older settlers are making rapid progress, and our agent reports specially in favour of the present type of Galician farmer, who makes an admirable farm labourer; and, being sought in other parts of the province for this work, a scarcity of farm help has been found of late to affect even the district of Teulon.

Ranchvale, Manitoba.

The farmers in this district reaped an abundant harvest in 1906, but they were seriously inconvenienced during the winter months from lack of train service, and

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at the time of this report many of the farmers have not been able to sell their grain. A large portion of this district has been homesteaded in previous years by Galician farmers, who have been generally successful, and are better off financially each year.

Dauphin, Manitoba.

The district has shared in the general prosperity of the west. More land is under cultivation, and the town and villages have been growing steadily notwithstanding the inconvenience which has been experienced during part of the last winter owing to shortage of cars by which farmers could market their grain. Crops were generally good, prices fair, and it is estimated that not less than 2,000,000 bushels of wheat will be the final figure for the northern portion of this district. Oats and barley were grown to a considerable extent, but were all consumed by the local demand for lumber camps and railway work. Some attention is being paid to mixed farming from time to time. Heavy importations of horses have been made bringing good returns, as many of the earlier foreign settlers are discarding their oxen and using good horses instead. Many transactions and transfers of land are reported, prices being considerably higher than any previous year. Considerable settlement has taken place among homesteads lying between Lake Dauphin and Lake Manitoba, and additional surveys are necessary. The excessive snowfall of last winter hampered lumber operations in some parts of the district, but, notwithstanding, there is a fair amount of building material ready for market. The demand for labour of all classes has been fairly well met, but outside assistance will probably be required, as the foreign element who largely filled this demand in the past, cannot longer be depended upon, they having themselves such large areas under cultivation requiring their continual attention to their own farms. The general health of the district is good, and conditions prosperous. During the year 357 homestead entries were granted through this agency.

Swan River, Manitoba.

The past season produced good crops, and the outlook for 1907 is exceedingly bright. Eight years ago the Swan River valley was practically unoccupied. Now there is a population of at least 7,000 souls, and the district contains several railway lines; one incorporated town, five villages, six chartered banks, seven elevators, thirty day schools, and many other conveniences of a commercial and social character. There is an abundance of timber all about this district, which creates a confidence among the settlers as to their fuel supply. During 1906 it is estimated 50,000 acres were under crop, 250,000 bushels of wheat have been shipped, and 350,000 bushels are yet in the farmers' hands. This district has been peculiarly successful in respect to those who arrived there with little or no means. Indeed in one case a settler who arrived seven years ago with only \$45 of capital, estimates his present financial worth to be at least \$5,500. Sixty-three carloads of settlers' effects arrived at Swan River station during this year. Most of the desirable homesteads have been taken up in this district, and, although the price of improved farms is steadily increasing, yet, they are excellent value and afford, in many instances, a better investment than a free homestead. Lands purchased seven years ago at \$3.50 per acre have been known to sell for \$20 per acre during the past year. The saw-mills tributary to this district expect to place ready for market 12,000,000 feet of lumber.

Melfort, Saskatchewan.

Government agents report a good increase in the settlement of the district. Particularly has this been noticed in connection with Tisdale and the townships to the north of that point. The crops for the past season were exceptionally good, wheat

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realizing 25 to 60 bushels per acre, oats 50 to 125, barley 40 to 60. The breaking of new land during last season indicates a large increase in crop area for 1907. Twenty cars of settlers' effects have been unloaded at Melfort, and probably 100 cars at Tisdale, Star City and Kinistino. The indications are that there will be a large immigration to this district, and that the coming season will be satisfactory.

Tisdale, Saskatchewan.

In May, 1906, the Salvation Army placed 18 families on land in township 46, range 14, west of the 2nd P.M., and since then considerable work has been done on that land, though perhaps not as much as some people expected, railway facilities at that time not being favourable. Some 740 acres have been broken ready for crop in 1907. Each of the families has a well-built house and some live stock, and as they rapidly pick up a good knowledge of farming, they should succeed as they deserve. It is estimated that 20,000 acres will be under crop in this district in 1907. Ninety-nine per cent of the new arrivals speak English, and farm help needed can be obtained without sending from the outside.

GIRLS' HOME OF WELCOME, WINNIPEG.

The capacity of this deserving institution has been, on several occasions, taxed to the utmost. During 1906, 1,667 persons were accommodated; of this number 605 were *bona fide* immigrants; 690 servants, house-keepers, &c., and 371 transients. The nationalities represented by the immigrants were as follows: English, 325; Scotch 164; Irish 84; Swedes and Finlanders 10; Welsh 18; German 7. The following table will show how the work and accommodation of this institution have increased from year to year:—

	Inmates.	Immigrants.
1901.	676	124
1902.	921	193
1903.	1,109	412
1904.	1,360	499
1905.	1,531	547
1906.	1,667	605

GRAIN EXHIBITS.

During the past season there was purchased for exhibition purposes 24 carloads of grain in straw, and grasses, and 510 bushels threshed grain from the following districts: Hartney, Manitoba; Moosejaw, Saskatchewan; Macleod, Alberta; Lethbridge, Alberta; Moffat, Saskatchewan; Harding, Manitoba; Brandon, Manitoba; Cardston, Alberta; Battleford, Saskatchewan, and Teulon, Manitoba.

A large quantity of vegetables, honey, dairy products and fruit was also purchased, and along with grain was distributed to the various government agents in the United States and Great Britain. Six hundred and seventy-three cases were distributed. A large display of grain and grasses was made at the summer fair of the Winnipeg Industrial Exhibition in 1906, and occasion was taken then to distribute very large quantities of immigration literature amongst visitors who arrived from the United States. In addition, a number of persons deeply interested in western Canada products have received small samples which have been carried by them to their homes and used by them for illustrative purposes. There is still on hand in our warehouse a good supply which it is expected will enable us to fill all orders until the crop of 1907 is reaped. The building of the new grain warehouse at Winnipeg, and the spur track alongside, has greatly facilitated the handling of this work.

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RAILWAYS.

I stated in the previous annual report that railway construction was proceeding very rapidly, and very large extensions of the three railway systems were provided for. It is to be hoped that the conditions of the labour market, &c., will permit the speedy completion of the lines now under construction, because it is found that the demand for homesteads has been, and is, even so early as the present time of the year, so great that unless railway construction is pushed much more rapidly than has been the case in the past, many of these settlers will be too far from a railway to enable them to successfully operate their land for years to come. Unfortunately it would appear from the various incidents which have happened in western Canada during the past winter that not only have the fuel dealers and other firms conducting mercantile business of all kinds, failed to appreciate and meet the situation which is caused by the influx of so many additional people each year, but the railways themselves have not been able to keep pace with the requirements of such a vast country, and it is quite evident that in some cases construction has proceeded too fast for the equipment at the disposal of the railway company. This may draw the attention of the world to the fact that western Canada opens up immense possibilities for safe and profitable investment of capital, and the utilization of a greater amount of manufactured articles than have yet been supplied. The net earnings of the railways in western Canada indicate very clearly what handsome returns await the investment of funds in railway construction and operation.

CONCLUSION.

It is a pleasure to officially acknowledge the practical and helpful assistance which has been given to many new arrivals by immigration chaplains appointed by several of the church organizations in Winnipeg, and also by the officers of the Salvation Army, and the Church Army. These officials, through the training of their calling, are frequently able to give new arrivals sympathetic and detailed advice which immigration agents and officers of this branch have not the time, or perhaps the ability to do so well, and I willingly record this appreciation of their services from year to year.

I have pleasure also in recording the unfailing devotion to duty which has characterized the staff under this branch of the department, and believe that the training and experience which they gain with each additional year's duty, better fit them for carrying out the policy of the department, which must always be sufficiently progressive to keep pace with changing needs and methods.

Respectfully submitted,

J. OBED SMITH,

Commissioner of Immigration.

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REPORT OF C. W. SPEERS, GENERAL COLONIZATION AGENT.

WINNIPEG, April 1, 1907.

W. D. SCOTT, Esq.,
Superintendent of Immigration,
Ottawa.

SIR,—I have the honour to submit a report of my work from June 30, 1906, to April 1, 1907.

During the month of July I made an extended tour of inspection through Saskatchewan and Alberta, looking over the different colonies, and adjusting some of the existing difficulties. I drove 250 miles in northern Saskatchewan, inspecting new districts for settlement. Report of trip submitted August 11, 1906. During the same month, under instructions from the secretary of the Department of the Interior, I investigated some discrepancies in general report, made by the Dominion Lands and Crown Timber officials, relating to the Doukhobor community. Report dated July 24, 1906. During the months of July and August, I accompanied the Pennsylvania Editorial Association through Canada, completing arrangements for their reception and entertainment throughout Alberta, Saskatchewan, Manitoba and British Columbia. Their reception was most cordial, and they were kindly welcomed and entertained at all the leading centres of population throughout the west. I am persuaded that the visit of these people will do much in spreading a knowledge of our country and its capabilities in the New England states. I endeavoured to supply useful information, as to the general features and characteristics of our country, its enormous resources and its adaptability to prosperous settlement. Full report, dated August 11, 1906. I investigated, under instructions from the Department of the Interior, seed grain advance to the British settlers of Lloydminster. Report dated August 11, 1906. I also purchased and had prepared a quantity of grains in the straw and vegetables, for the use of the department, at the State Fair Exhibit. Report dated August 22, 1906. Also a further investigation into some Doukhobor discrepancies. Report, August 27, 1906. In September I reported upon the adaptability of certain districts for the colonization of Swedish families. Report, September, 1906. During the same month I placed the exhibit with Agent C. J. Broughton, at Springfield, Illinois. The State Fair was largely attended; our products were the best on exhibition; much useful literature was distributed, and a great interest manifested in western Canada. Report, October, 1906. Under instructions from the Deputy Minister of the Interior, I made a revision of the townsite of Lloydminster, in the interests of the British settlers, being a final and complete revision of that townsite, for the department. Complete reports submitted to deputy minister, November 9, 1906. I inspected the settlements at Lloydminster, the Doukhobor community, the Galician settlements and the German colonies, finding them all in a most prosperous condition. I examined the lands northwest and north of Battleford, as to their adaptability to German colonization. Report dated November 10, 1906. I inspected the conditions existing at our immigration halls at Lloydminster, Rosthern, Craik, Davidson, Regina, also North Battleford. Report to Commissioner Smith, November 10, 1906. I also made a report on Edward Fairley, and answered some communications from the United States agents. Reports dated November 26, 1906. In December I visited Saskatchewan, recommended the patrol of isolated districts by police, owing to the inclement weather and great depth of snow. Report dated December 17, 1906. In January I examined, under instructions from the secretary of the Department of the Interior, matters pertaining to the Indian reservation at Kamsack. Report dated January 25, 1907. I

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also reported this month on an investigation made, at the request of J. Bruce Walker, of certain statements appearing in the English newspapers detrimental to our country. Report to J. Obed Smith, January 5, 1907. In January I made an extended tour through the west, pointing out the conditions of settlement. Full report January 25, 1907. During the same month I discussed with the Saskatchewan government existing conditions in the isolated districts throughout that province. Report, February 4, 1907. Under instructions from the Minister and the Superintendent of Immigration, I proceeded to Battleford in February to extend relief to deserving and needy settlers. This incurred considerable work and much correspondence, and reports have been forwarded regularly to the Superintendent of Immigration, February 15, 16, 19, 25, and during the month of March. Considerable work has been involved during the past winter in keeping in touch with the various settlements, particularly with those that were more recently established, to see that they were enduring no special privation, and that they were supplied with the necessary food and fuel. I think the emergencies have been well met by the department, and that we have suffered less in western Canada, confronted with extraordinary conditions, than they have in the border States to the south of us. We have had a heavy immigration during the last nine months, made up mostly of the agricultural classes.

The country is progressing rapidly; wages to the labourer have been very good. The production of last year was all that could be desired, and every branch of the industry of agriculture seemed very prosperous. Wheat, the staple production, has brought a fair price, and was of good quality. Beef cattle are higher this spring than they have been for some years, and are bringing $4\frac{1}{2}$ cents per pound live weight. Eighty thousand cattle were shipped to Great Britain last fall. Hogs have been dearer during the past year than they have been for twenty years. They have been bringing from $6\frac{1}{2}$ to 7 cents live weight. Sheep are also bringing a high price. Coarse grains, butter, cheese, roots and vegetables, bring a good price, which is very encouraging to the producer, and all these things will further encourage diversified farming, for which our country is specially adapted.

The fertility of our soil and its enormous producing capability should have a tendency to call many more to the important industry of agriculture.

We are in great need of more railroads; a large percentage of last year's production is still stored throughout the length and breadth of the west, and most of the elevators are well filled, and much grain is still held in the farmers' granaries. I am aware that the railroads have been confronted with great difficulties that may not recur in many years; but we are confronted with the difficulty that thousands of people with their cars of effects are upon us, ready to make their homes, when they can reach their destination, and this is taxing the power of the railways so much that the moving of last year's products will have to be deferred.

The country is in a most prosperous condition; there is a vast area of good territory available for new settlers, and some important colonies should be established this year. The people of all nationalities are most hopeful. The established settlements are very prosperous.

Your obedient servant,

C. W. SPEERS,

General Colonization Agent.

JUVENILE IMMIGRATION.

REPORT OF G. BOGUE SMART, CHIEF INSPECTOR OF BRITISH IMMIGRANT CHILDREN AND RECEIVING HOMES.

OTTAWA, March 31, 1907.

The Superintendent of Immigration,
Ottawa.

SIR,—I beg to submit my eighth annual report as Chief Inspector of British Immigrant Children and Receiving Homes.

Another satisfactory year's work is to be recorded, and the number of inspections for the last three months of the present fiscal year is well advanced. During the calendar year, 1,319 individual reports were transmitted to the British government, an increase of 114 over the previous year.

The number of children under the supervision of this branch of the service is steadily increasing, and with this augmentation the volume of work has correspondingly advanced.

Visits of inspection have been made at the various receiving and distributing centres. The work of the societies, I am pleased to state, has been conducted with care and devotion to the individual welfare of their wards, and with few exceptions the children are comfortably settled.

The following statement will show the number of children emigrated to Canada during the fiscal year by some of the principal societies, and the number of applications received for children during the same period:—

Society or Agency.	Children immigrated.	Applications received for Children.
Dr. Barnardo's Homes, Toronto and Peterboro', Ontario, and Winnipeg and Russell, Manitoba.....	944	10,810
Miss Macpherson, Stratford.....	91	494
Mr. J. W. G. Fegan, Toronto.....	"	(a) 500
Rev. Dr. A. E. Gregory, Hamilton.....	109	(a) 550
Rev. Robert Wallace, 'Marchmont Home,' Belleville.....	*	595
'Fairknowe' Home, (Mr. Quarrier's,) Brockville.....	*	782
The Misses Smyly, Hespeler.....	10	118
Mrs. Birt, Knowlton.....	79	731
The Catholic Emigration Association.....	175	519
Church of England Waifs' and Strays' Society, Sherbrooke.....	*	83
Church of England Waifs' and Strays' Society, Niagara-on-the-Lake.....	17	382
Bristol Emigration Society.....		57
Mr. Middlemore, Halifax.....		(a) 125
The Salvation Army Emigration Agency.....	39	(a) 50

The above statistics cover a period of nine months only.

* Partes for 1907 had not yet arrived. (a) Approximately.

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STATEMENT.

Table showing the number of juvenile immigrants who arrived in Canada during the past five years, together with the number of applications received by the various agencies during the same period:—

Fiscal Year.	Children immigrated.	Applications received.
1900-1	977	5,783
1901-2	1,540	8,587
1902-3	1,979	14,219
1903-4	2,212	16,573
1904-5	2,814	17,833
1905-6	3,258	19,374
Total	12,780	82,369

The above statistics are most striking and indicate the extraordinary and steady increase in the demand for the British immigrant child in Canada. Juvenile immigration has lived down adverse criticism and this proof of its value is irrefragable.

It is a matter of personal satisfaction to me to be able to advise you that this branch of immigration is more clearly understood, and from a national point of view its value and importance are better appreciated by Canadians than heretofore. It is indeed unique, and in principle and policy differs from our general system of immigration. It is well that it is so, otherwise I fear it would fail to enlist that practical sympathy which it now commands from so many sources in Great Britain.

In previous reports which I have had the honour to address to you my endeavour has been to describe the various functions of this branch of the service, but the subject is one so copious of detail that my observations have been necessarily more general than specific. As early environment, and moral, religious and industrial training, or rather training in industriousness, have such an important bearing on the prospects and success of these young people in our Dominion, I have from time to time in public addresses and official memoranda described the predominating features of the child reclamation movement as ascertained by a personal study of the subject in the larger cities and other thickly populated centres of the old land from whence our annual influx of British juvenile immigrants has been drafted.

In the large family of children over whom my jurisdiction extends are many who have been hurled from respectability to destitution through the misadventure of their parents and friends. The large majority are, however, the children of poor but decent parents.

The cost of outfitting and emigrating a child to Canada amounts to about \$50 or \$60. This expenditure is claimed to be about one-tenth of the actual cost of maintaining the child in an institution. In contributing so generously towards the emigration of necessitous and unfriended children, the people of Great Britain are actuated first by a Christian and humanitarian spirit, and secondly by a duty to the state. No one who has not actually witnessed hardship and poverty, as it exists in the old land, and its effect upon helpless childhood, can adequately appreciate the true value of the work. That well known social writer, Mr. George R. Sims, has truly said: 'No man who has seen how the poor live can return from the journey with aught but an aching heart.' A greater interest I believe has been awakened in this important branch of the wide field of philanthropic action in England than has existed at any previous period. The Rev. Dr. A. E. Gregory, Principal of the Children's Home and Orphanage, Bonner Road, London, in a recent number of 'Highway and Hedges' has stated that 'the most remarkable development of the life of the last century was its interest in children. It has been said that its great discovery was the discovery of

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the child.' He goes on to say 'this is true to some extent of children in all classes, but it is specially true of the children of the poor. When first public interest in the children of the poor was aroused a great and horrible discovery was made. Men began to realize that children, made in the image of God, were suffering cruelties and wrongs unspeakable.'

A gentleman of prominence in Liverpool official circles, in a recent letter to me said in part: 'I only wish we could send you more of the poor boys and girls for whom there is little or no hope here, but who might become useful citizens of your great territory.'

The awakening of the public conscience in Britain to the rights of suffering and neglected children has spread to Canada's shores, for in many, if not all of our provinces, the legislatures have enacted laws for the protection and elevation of Canadian children, and Children's Aid Societies have been formed and are doing excellent work in many cities and towns. To the existence of such enactments and to the solution of a great sociological and economic problem the juvenile emigration movement was undoubtedly a leading factor in bringing to the attention of the people of Canada the manner in which children similarly situated were dealt with in the mother country.

As a farm labourer the home boy has proved a success, and after a few months' experience his work needs not to be apologized for. If he has been wisely indentured, by the time he reaches the age of eighteen there should be no reason why he should not possess a sum of at least two hundred dollars, which for an industrious youth is a sufficient nucleus to make an independent start. The following extracts from letters indiscriminately selected may be interesting as showing how many of these youthful labourers are progressing:—

'I have taken up my homestead, and at the present time I am ploughing my own place; my sister, whom I brought out, is working close at hand, and if all goes well will keep house for me next spring.'

'My brother in England is seriously sick. I want you to send me five dollars from my bank money to help him along. I am getting on fine.'

'My brother wants to come to Canada. Will you send him fifty dollars from my bank money to fetch him out here.'

From a former home boy: 'I would like a boy to help on our farm. I was married six years ago. I have only 40 acres to work, keep 7 head of cattle, 4 horses, a few hogs, with chickens, geese and turkeys. We sold \$70 worth of poultry at Christmas. The Methodist minister will give you my character.'

The majority of the boys are thrifty and saving and appreciate the value of their earnings, as a look into their savings bank accounts would indicate. In speaking recently with Mr. Frank Hills, Governor of the Children's Home, Hamilton, on this subject, he stated: 'I am often asked what (Home) boys do with their money—that is very hard to tell, but we know in many instances it is put to very excellent use. One boy may decide, after he has been in Canada a few years, to pay a visit to the old country to see his friends, he has money to pay his fare, money to live on while there, and as a rule sufficient to pay his fare back to Canada. These visits, while we do not encourage them, have a salutary effect upon the boy's ideas. He, as a boy, did not realize the want, squalor, the lack of work in the big cities of England, and he soon gets restless and longs to return to the bountiful Dominion where there is plenty for all. Some boys invest their earnings in a government land grant, and rough it through as the early pioneers have done before them. Some come into the cities from the country, and take a commercial course in a business college or telegraph school, and others settle down to married life in city or country, making a little home of their own. Not a few send regularly some contribution to their poor relatives in England, and quite a number have brought to Canada a father, mother, or brother and sister—paying all expenses.'

The general health of the children has been excellent, and it is quite superfluous to dwell upon this most important feature of the work further than to add *en passant*

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that for some years past a great improvement has been made by the various English societies in selecting children for Canada. I have reason to know that special care and attention have been exercised to see that their mental and physical qualifications have been good. The standard of requirements in a prospective juvenile emigrant should be similar to that applied to a recruit for the Imperial army or navy. Those with the slightest suspicion of physical weakness or mental defect should be rejected out of kindness to themselves. The Canadian official regulations state that every immigrant must pass a careful medical examination at the ports of embarkation and disembarkation, and be certified as physically, mentally and morally sound. As far as the government is concerned it welcomes all immigrants, whether juvenile or adult, who conform to these regulations.

The sentiment of the Canadian people as to the type and class of immigrant required is well defined, and is now better known in Great Britain than heretofore. It is a recognized fact that, while we have a vast territory for cultivation and development, and our most urgent need is population, only healthy, sober, hardworking men, women and children are welcomed. With plenty of courage, good constitutions and a good degree of strength, such are almost certain to succeed. Juvenile immigrants have the advantage of adults, for they have the privilege of training on a Canadian farm before they are of age to homestead or procure land for themselves. The late Right Hon. Samuel Smith, in an address at Mrs. Birt's annual meeting at Liverpool, stated in part: 'The children, if trained well before departure, rapidly adapt themselves to their new life, 95 per cent of them do well—some think even more than that.' From experience it would appear that the opportunities of success for the English so-called 'Home' boy has been found greater in Canada, judging by the fact that juvenile emigration to other colonies has at various times been tried as an experiment and practically abandoned.

Many of the young immigrants seize the opportunities afforded them, and put them to the best use, but others, a few in number, wish to escape from the control of the societies and their benefactors, and exhibit a love for adventure and a taste for travel. Apparently some have a hope of making a livelihood and realizing a future without the exertion of labour.

The emigration of boys of 16 years of age who have not previously undergone a definite period of probationary training in a home or school in Great Britain does not meet the requirements of our farmers or Canadians generally.

The advantages afforded industrious and well-behaved boys and girls in Canada are well understood in Great Britain.

But little progress has been made by the societies in attempting to cope with the demand for juvenile farm labour. During the past calendar year the influx has been greater than in any previous year in the history of the movement, but notwithstanding this the supply has been wholly inadequate.

In the course of my duties, and since my last report I have made a tour of inspection of a number of children in the agricultural districts of Ontario and Quebec, and it was very gratifying indeed to find, on the whole, such a desirable class of juveniles, few being of the undesirable or unemployable type.

It is the desire of the department that the individual inspections should be as thorough and effective as possible. No previous notice is given, and the children are found in their every day dress, engaged in their daily routine; and in this way the quality and suitability of the situation are more easily determined.

It is with much regret that I have to chronicle the death of Mr. Arthur Chilton Thomas, and of Miss J. Loveday. Mr. Chilton Thomas was one of the most active members of the Catholic Emigration Association, a leading authority in Great Britain on juvenile sociology, and an earnest supporter of the juvenile emigration movement. On several occasions he visited Canada, and had a thorough grasp of the Canadian phase of the work. Through his writings and addresses he did much towards the dissemination of a better knowledge of the work in

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Canada, and his loss to the Catholic Association is very deeply felt. The Barnardo Homes have sustained an irreparable loss by the death of Miss Loveday, who perished in the fire which destroyed the Gilmour hotel in Ottawa last September. Miss Loveday had come to the Capital in the prosecution of her work, and was a guest at the ill-fated hotel. For fourteen years she had been connected with Dr. Barnardo's Girls' Home, at Peterborough, Ontario. She was a lady of shrewd common sense, devoted to her duties and held in the highest regard by those with whom she came in contact.

In conclusion, I wish to say that the existing societies and their Canadian agencies are doing a service to the Empire that cannot be overestimated. They have been termed 'curative agencies.' The rescue from the hardships of destitution and the temptations which particularly beset unbefriended childhood in Great Britain, and their subsequent separation, by an almost impassable gulf, from the temptations of their original environment by emigration to Canada, are a work of transcendent importance to the future of our Empire. In a recent number of *Day and Night*, it is stated, in reference to the Barnardo Homes, that 'for many of the children the homes prove a succor indeed, a moral and spiritual breakwater that prevents the inroads of a pitiless sea of danger and suffering.' These words embody a high tribute to the work at large.

My assistants have again this year reported, on the whole, a chorus of praise on the British juvenile immigrant in Canada. Mr. K. J. Henry, in his report for the past nine months, says: 'In general I found the children well cared for and giving good satisfaction. As a rule they were smart and intelligent. The farmers with whom the children are placed are of a good class and willing to do their duty by the children. In some cases they were doing more than the indentures called for. Everywhere I visited I was met by parties inquiring about how to get a boy or a girl, and in some instances both were wanted by the same person, particularly where they did not have any children of their own, or where their children had grown up and left the farm. I mention this because it goes to show not only the great demand for the boys and girls, but that those in their midst are appreciated.'

In his annual report, Mr. R. W. Hillyard, in part, states: 'Another year's work in connection with the inspection of British immigrant children affords a further opportunity to estimate the value of the work being done by the different societies engaged in rescuing these helpless ones and sending them to Canada, where comfortable homes are awaiting them.'

'In a large majority of cases I found the children comfortably placed and giving satisfaction to their employers. Only rarely have I found a child thoroughly bad, and the percentage of such is very small. The children are generally well housed, cared for and clothed and fairly remunerated for their services. They are unquestionably a great help to our farmers. Owing to the scarcity of farm help these children are yearly becoming more valuable, and the training which they here receive is fitting them for future usefulness and success. The annual visits from agents of the homes, and the government inspection of the children insure proper treatment and remuneration. Too much importance cannot be attached to the value of yearly inspections. The work being done through the charitable organizations in the old land is beyond all praise. Many of the children have completed their term of indenture with great credit to themselves and to the agencies which assisted them.'

It is ever a pleasure to acknowledge the kindness of the various agencies and their unflinching promptness in carrying out my recommendations.

THE CHILDREN'S AID SOCIETY OF LONDON, ENGLAND, CANADIAN AGENCY, SHAFTESBURY HOUSE,
WINNIPEG.

Under the auspices of this society thirty children were sent to Canada during the past year. Reports received at the department indicate that these youthful immigrants are of a satisfactory class and are doing well.

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THE SALVATION ARMY.

The Salvation Army has not adopted juvenile immigration to any extent as yet. During the past nine months, however, thirty-nine children were brought out and placed in situations under the Army's auspices.

* DR. BARNARDO'S HOMES.

During the past year I have personally inspected a large number of Barnardo boys and girls in their new homes and situations throughout the province of Ontario. Their healthy, wholesome appearance, behaviour and progress impressed me favourably and spoke well for their pre-emigration training. A careful and continuous oversight is maintained over their children, the number now aggregating over 16,000.

The superintendent advised me that their first party for the season of 1907 was expected to sail on February 21, and would number 300 boys and girls. Similar parties will from time to time arrive during the summer months.

My annual visits of inspection have been paid to the receiving homes at Toronto and Peterborough, Ontario. These homes are under efficient management.

MISS MACPHERSON'S HOME, STRATFORD, ONTARIO.

On February 13, last, I made my annual visit of inspection to this pioneer receiving home. There were ten very young children in residence, all being neatly dressed and bearing every appearance of good care.

Mr. Merry, who has charge of the Canadian branch of the work, stated in part 'that the rapidity with which the children were provided with good homes evidenced the fact of their careful selection and training in England.'

Their visitors have found fewer cases requiring the removal of the children from their original situations and homes, but in four such cases transfers were made, and of these, with one exception, the children have settled down in their new homes and promise well. During the past winter they have received visits from a number of their children, and Mr. Merry was much impressed by the marked change in their appearance and their increased height, which spoke volumes for their treatment in Canada, and the effect of the bracing Canadian climate. The health of their wards has been good, and there has been a complete absence of any infectious disease.

Many of last year's arrivals have gone to farmers known to Mr. Merry through their having had their wards in the past. 'It has been our greatest pleasure this year,' Mr. Merry stated, 'to see brothers and sisters who had emigrated in previous years and whose success has been the means of bringing other members of their families to Canada.'

A large number of their juveniles have come under the inspection of the department during the past year, and with few exceptions they were found in good situations and giving good satisfaction.

THE BRISTOL EMIGRATION SOCIETY.

This society did not promote the emigration of juveniles during the past year.

THE BOYS' AND GIRLS' REFUGES AND HOMES, STRANGWAYS, MANCHESTER, ENGLAND.

A party of juveniles from Manchester is expected to sail for Canada on April 4, in charge of Rev. Robert and Mrs. Wallace, of the Marchmont Home, Canada. A careful selection is being made of those children who are fitted for the new life, and whom it is desirable to remove from the risk of coming into association later, with degraded relatives who profess some interest in the child when he becomes of working

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age. Mr. Wallace gave the boys a lecture the other day on Canada, telling them of the life on the farms, and the good prospects for boys who were honest, truthful and industrious. He has a large number of applications for boys, five or six for every boy he places out, and so has a wide selection, and can find every lad a good home where he becomes one of the family, sharing the comforts as well as the work of the farm life.

FAIRKNOWE HOME, CANADIAN BRANCH OF THE ORPHAN HOMES FOR SCOTLAND (MR. WILLIAM QUARRIER).

During the years from 1871 to October 31, 1906, 13,000 have passed through Mr. Quarrier's homes, and of this number 5,000 were emigrated to the Dominion. It may be interesting to note that £670,000 has been received in voluntary gifts, of which £270,000 has been expended on buildings and lands and £400,000 on maintenance of the homes.

Any child, in any part of Scotland, if fatherless and destitute, is eligible for admission to the homes, and it is, therefore, from these classes that their juvenile immigrants are selected.

Of the 1,100 children under supervision 25 only have changed their situations during the past calendar year, which is a most satisfactory and gratifying feature as an evidence of careful selection and a credit to their early training in Scotland.

Their juveniles, Mr. Burges states, are in great demand, and to-day he had two applications for each child in the forthcoming party which is expected to reach Canada in April.

CHURCH OF ENGLAND WAIFS' AND STRAYS' SOCIETY, CANADIAN BRANCHES, SHERBROOKE, QUEBEC AND NIAGARA-ON-THE-LAKE, ONTARIO.

A number of boys and girls from this society have been inspected during the past year and reports indicate that they are progressing satisfactorily. During the year the Rev. Canon Rudolf, the chief executive of this influential society, visited Canada, and I have reason to believe that he carried home with him an impression of the opportunities afforded their young immigrants in Canada.

THE COOMBE, HESPELER, ONTARIO (THE MISSES SMYLY OF DUBLIN).

On December 10, I visited this home and had the pleasure of addressing their second annual meeting. I was much impressed by the deep interest evinced by the citizens of Hespeler in the work undertaken by the Misses Smyly, and by the expressions of high regard in which these ladies are held.

I heard many testimonies from farmers who have boys from the Misses Smyly's Dublin homes, as to their value as farm helps and good behaviour. The children spend some months at the home undergoing a preliminary training in taking care of cattle, poultry raising and gardening. They also attend the local public school.

The home is under efficient management.

MR. FAGAN'S HOME, TORONTO.

The superintendent states that their past year's operations have been very satisfactory. The children are well settled and giving their employers general satisfaction. All are placed out under yearly indentures, and in most cases receive their wages half-yearly, which are placed in the bank. The combined savings of the children at this date aggregate \$11,000. One youth has laid by \$800, and several have \$500 and \$600, respectively, in savings banks, a remarkably creditable showing, indicating that the children are imbued with the essential principles of success.

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The first party of juveniles is expected to arrive early in April.

THE CHILDREN'S HOME AND ORPHANAGE (REV. A. E. GREGORY, D.D.), HAMILTON, ONTARIO.

On March 19, I visited this receiving home and made a careful inspection of their first immigration party for the season of 1907. I cannot recall in the whole party one poor type, and they were all well advanced in schooling for their years.

Mr. Frank Hills, governor of the home, informed me that 'During the past year we have received some 106 children from England. They have been without exception a good type of boys, healthy, robust and well set up physically, just the kind capable of hard work. The boys have ranged from twelve to twenty-one years of age, many of them having been trained to manual labour in our farm home in Lancashire.

'We have received some 550 applications from all parts of Ontario, and many had to be declined because the demand was so much greater than the supply. With so many applications there is no difficulty in procuring good homes with some of the best farmers in Canada. These farm homes have been carefully selected, and as the boys are placed in the older settled districts of Ontario, they naturally secure many privileges, advantages and even luxuries which are not procurable in newer districts.

'Wages have of late years materially increased, we find farmers are only too ready to pay a good wage for a good type of boy, who is not only willing to work, but can do it intelligently.

'Thousands of dollars are placed in the savings bank every year, a splendid tribute to the thrift and industry of boys who arrived in Canada without a cent to their name. Had we two or three hundred more boys to place we should have had no difficulty in procuring good homes for them.'

THE CATHOLIC EMIGRATING ASSOCIATION, ST. GEORGE'S HOME, HINTONBURG, ONTARIO.

My annual inspection of this institution was made on January 6. Many alterations have been made in the interior of the home. All parts were found in good order, and the comfort of the children while here is well provided for.

The honorary manager reported a very satisfactory year's operations. Three hundred and ten children, viz., 263 boys and 47 girls, were received here and placed in situations in 1906, making an aggregate of 993 boys and 288 girls, or a total of 1,281 children under supervision. The general health of their wards has been decidedly good. Seven deaths occurred during the year, five of which were by accident.

It is anticipated that parties of children will arrive each month during the balance of the year. The majority of these young immigrants will be placed in Ontario and Quebec, and some will go to New Brunswick and Nova Scotia.

It is interesting to note that eight of their boys, who had been originally placed on farms and have completed their indentures, are attending college, paying their own way out of their savings.

I again had the pleasure of addressing the annual gathering of their 'old boys and girls,' at St. George's Home, at which I met 120 boys and girls. Their general appearance of prosperity, intelligence and alertness was a great credit to the society.

The honorary manager and his staff are deeply interested in their duties, and are doing a good work.

MRS. BIRT'S HOME, KNOWLTON, P.Q.

This home is pleasantly situated and well adapted for its purpose. It is in charge of a resident Canadian superintendent and two capable and experienced English ladies.

Two bands of juvenile immigrants are sent to Canada each year, one usually in February and another in May. Both boys and girls are emigrated, and the demand for their wards has for years been far greater than the supply.

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Mr. Andrew Drummond, for many years identified with Mrs. Birt's work in Liverpool, and whom I met at Knowlton on the occasion of my annual inspection of the home, reports: 'Our English boys and girls readily and heartily adapt themselves to the Canadian country life. In most cases the life has a great charm for those whose early years have been spent amid crowded surroundings. With few exceptions, our rescued little ones are behaving creditably, bringing comfort and gladness into many homes.'

I made a careful individual inspection of their first party for 1907, and found them a splendidly selected lot and of the type required for farm and domestic work in Canada. Those of the school age will be indentured with a view to their attendance at school. The children were all well outfitted, each having a sufficient supply of clothing for their first year's residence in Canada.

MARCHMONT HOME, BELLEVILLE, ONTARIO.

On the occasion of my official visit I found but two small lads in the home. I found the records splendidly kept and needed information readily available.

In the year ending December 31, 1906, 112 children, 81 being boys and 31 girls, were received and distributed by Rev. Mr. Wallace. No difficulty was found in placing this number, in fact I am advised that there were almost seven applications for each child. The children of last year were of a very good class, and have settled down in their new homes very satisfactorily, very few having returned.

Mr. Wallace advises me that 'there have been a number of marriages amongst the older boys and girls this year, and several have applied for children to bring up, in their turn. Two or three girls have taken up work as nurses in hospitals in Canada and write very happily about their work. Two of our old boys have been fully ordained during the year, one in the Baptist and one in the Methodist ministry, and have taken up the work of the ministry in settled pastorates.

'We continue as a home to support our missionary representative in China (one of our 1879 boys), as we have done since he went to China nineteen years ago.

'The work of visiting has been prosecuted as usual, and the reports have been most satisfactory on the whole both from the children's standpoint and that of the employees.'

Your obedient servant,

G. BOGUE SMART.

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REPORT OF THE CHIEF MEDICAL OFFICER.

OTTAWA, June 3, 1907.

W. W. CORY, Esq.,

Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to transmit herewith the fourth annual report of the medical inspection service covering the fractional fiscal year, beginning July 1, 1906, and ending March 31, 1907.

The operations of the service include all the ports referred to in last year's report, and further include North Sydney, N.S., where a medical officer has been appointed to inspect all immigrants arriving from Newfoundland and other foreign ports. Hence the regular medical inspection of all immigrants arriving in Canada via ocean ports is carried on at North Sydney, Halifax, St. John, Quebec, Montreal, Vancouver and Victoria in Canada, and at New York by a Canadian medical officer, while those at other Atlantic seaports in addition to the United States inspection are again examined when they arrive at Montreal.

The methods of inspection inaugurated in 1903 have gradually been extended, with a view to meet the requirements of the Immigration Act as amended in 1906, and may be said to be at least as precise in their nature and as extended in their scope as those of any other country. That some idea of the work done may be had, the following table is made to show the total number of vessels arriving at the several seaports of Canada for the nine months of the fiscal year:—

TABLE I.

STATEMENT showing the total number of vessels carrying immigrants arriving at the ports of Quebec, Halifax, St. John, North Sydney, Vancouver and Victoria during the fiscal year 1906-7 (9 months).

Port.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Totals.
Quebec	30	30	30	25	17	.....	.....	.....	.....	132
Halifax.....	12	11	11	6	11	18	19	18	24	130
St. John.....	2	4	3	1	5	13	9	11	15	63
North Sydney .. . . .	.....	.....	.....	.....	4	11	12	9	4	40
Vancouver.....	4	5	2	3	3	3	2	3	4	29
Victoria.....	6	8	7	11	6	8	6	6	8	66
Totals.....	54	58	53	46	46	53	48	47	55	460

An observation of the table shows in an interesting way the varied distribution of the work at different seaports. Thus at North Sydney there is the tri-weekly steamer from Newfoundland throughout the year; at Halifax and St. John weekly steamers from the West Indies, and from November till April practically all the immigration from European ports, with occasional vessels throughout the summer months. Quebec, it is seen, receives almost all the European immigration to Canadian ports from May to October, while Montreal is the point at which immigrants arrive

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after inspection at the several United States Atlantic seaports, as Portland, Boston, New York, Baltimore and Philadelphia.

At the Pacific ports of Vancouver and Victoria, there is, as will be observed, a steady all-the-year-round influx of Asiatics, while the daily Puget Sound steamers demand steady attendance.

This varied distribution of monthly immigration, makes the necessity for different arrangements for medical inspectors at different seaports apparent. As many as 7,000 immigrants have arrived at Quebec within a single day, and 30,000 in a single month. Similarly at Halifax and St. John, several thousands have arrived in a single day. As all second-class passengers are inspected at Quebec on shipboard, it is evident that to meet the demand of the passengers and the transportation companies, ample facilities for rapid medical inspection are necessary.

As explained in previous reports, the work of medical inspection is supplemented by that of medical detention in special immigrant hospitals erected and equipped for the purpose at the several ports. During the past year new hospitals have been erected at Halifax and Quebec, and one erected at Vancouver by the Canadian Pacific Railway Company on the docks for this special work has been leased and another at Victoria will shortly be under construction.

As the type of hospital for this work varies somewhat from the ordinary general hospital, and now that two of the most modern are being completed, it is proper that a brief reference to such be made.

That erected at Quebec is the model on which others are based and its general features will be gathered from the attached photographs.

It will be remembered that the inmates are largely continentals who speak languages not familiar to all the several officers, that they have never been accustomed to modern conveniences, and that many of the different nationalities have to be under the supervision of the same officers. This necessitates that all modern methods for safety from fire be adopted, hence buildings constructed of stone, cement and iron have been erected. It will also be remembered that immigrants are often detained against their will, making a certain degree of restraint necessary, and that in consequence the hospital officials, apart from their medical affairs, have to be guards as well as nurses, and to this end the wide balconies protected with strong wire screens for use in wet weather afford every opportunity for recreation, exercise and fresh air, while facilitating the supervision of the immigrants. In addition to kitchen, laundry and engine room, the basement mostly above ground provides a splendidly lighted dining-room adequate for three hundred persons.

The ground floor has a men's large ward lighted on three sides and with ventilating shafts to sky-light and ventilators in the roof. Two hospital wards and a perfectly lighted operating room are attached. All the rooms are adequately equipped with porcelain basins, closets and spray baths, while folding-beds add much to the facilities for cleanliness.

The first floor has two general wards and four family wards, all similarly equipped and lighted and ventilated by sky-lights.

The front portion of the building on the ground floor and first floor is devoted to offices and officers' quarters; the whole building has hot water heating, electric lighting and an abundant water supply from city mains.

Attached to these several hospitals are large grounds where exercise and recreation and some employment will aid in promoting the health of immigrants temporarily detained. That such equipment is demanded was apparent so soon as the medical inspection of immigrants was systematically begun; and that it is now much more required may be judged from the fact that the total immigration to Canada during the fiscal year was 124,667 or an increase of 37 per cent over the same period in 1905-6. The following table will illustrate the use of these hospitals:—

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TABLE II.

STATEMENT showing the number of immigrants who were detained and the number debarred at ocean ports since December 1902, when medical inspection was first begun.

Port.	Fiscal Year 1902-03.		Fiscal Year 1903-04.		Fiscal Year 1904-05.		Fiscal Year 1905-06.		Fractional Fiscal Year (9 months) 1906-07.		Totals.	
	Det'd.	Deb'd.	Det'd.	Deb'd.	Det'd.	Deb'd.	Det'd.	Deb'd.	Det'd.	Deb'd.	Det'd.	Deb'd.
Quebec.	15	15	817	179	1,422	454	1,163	320	523	117	3,940	1,085
St. John.	134	134	313	68	145	6	396	32	113	13	1,101	253
Halifax.	124	124	705	27	449	36	366	10	392	7	2,035	204
Montreal.					146	2	137		208	11	491	13
Vancouver and Vic- toria.					397	113	1,456	118	2,257	242	4,110	473
New York.							52	44	50	50	102	94
Totals.	273	273	1,835	274	2,559	611	3,570	524	3,543	440	11,780	2,122

A study of Table II. reveals some most interesting facts. It will be noted that the number detained in the fiscal year of nine months is almost equal to the total for 1905-6, and that the number for that year was more than one thousand greater than in the year previous. But it will be noticed that the ports at which the greater number of detentions have taken place have changed their relative positions during the three years. Thus in 1904-5 there were 1,422 detained at Quebec in a total of 2,559, much the same number was detained in 1905-6, but only 523 during this fiscal period. The number detained at Halifax has remained approximately the same during the same period, while that at St. John, large in 1905-6, fell to one-third during the present period. This, in view of the very large increase in European immigration, is of much interest. It has already been stated that the character of the inspection has been more extended and exact than ever before; and the only conclusion to be derived from this is that the steamship companies have learned by experience the necessity for greater care in having intending immigrants examined at ports of their embarkation. Another reason, perhaps, is that fewer continental immigrants from southern Europe have been arriving via Canadian seaports. The essential reason is, however, that through steady pressure upon the steamship companies, and the personal relations established with the medical officers of the boards of trade and the great steamship lines at the several British and continental seaports, aided by the official visit of Dr. J. D. Pagé, the chief medical officer of the port of Quebec, during last winter, European medical officers and booking agents are learning to understand exactly the requirements of the new Immigration Act. That this has not yet been fully understood at the Pacific coast ports, may be gathered from the enormous increase in detentions at the port of Victoria. From Table II. will be gathered some idea of the large number, not only of vessels inspected, but also of the possible detentions. While a number of those are from Puget Sound ports, the principal number detained are immigrants arriving on vessels of the Canadian Pacific Steamship Company bound to Canada, or on vessels *en route* to United States ports on Puget Sound, but touching to land passengers and freight at Victoria. The notable difference between the number detained at Victoria and Vancouver will thus be understood, Victoria being really like Quebec for the St. Lawrence, the first port of call for inward-bound ships.

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As regards the ports at which detained immigrants arrived, and the number detained in proportion to the number carried by the chief steamship lines, the following Tables III. and IV. will be of interest:—

TABLE III.

STATEMENT for the ports of Halifax, St. John and Quebec, showing the number of immigrants detained and the number debarred in the Fiscal Year 1906-7 (9 months).

SS. Line.	Port.	Number examined.	Detained.		Debarred.	Ratio of detained to Number examined.	Ratio of debarred to Number examined.
			Male.	Female.			
Allan SS. Line.....	Halifax.	18,489	239	95	5	1 in 55	1 in 3,698
" "	St. John.....						
" "	Quebec.....	22,836	83	33	39	1 in 197	1 in 586
	Total.....	41,325	322	128	44	1 in 92	1 in 939
Dominion SS. Line.....	Halifax.....	3,325	26	13		1 in 85	
" "	Quebec.....	12,509	127	77	44	1 in 61	1 in 284
	Total.....	15,834	153	90	44	1 in 65	1 in 360
C. P. & R. SS. Line.....	Halifax.....	1					
" "	St. John.....	13,458	72	25	11	1 in 139	1 in 1,223
" "	Quebec.....	19,593	118	78	30	1 in 100	1 in 653
	Total.....	33,052	190	103	41	1 in 113	1 in 806
Donaldson SS. Line.....	Quebec.....	2,657	5	2	4	1 in 380	1 in 664
" "	St. John.....	1,293	10	6	2	1 in 81	1 in 647
	Total.....	3,950	15	8	6	1 in 172	1 in 658
Other Lines.....	Halifax.....	791	13	6	2	1 in 42	1 in 396
"	St. John.....	255					
"	Quebec.....	54					
	Total.....	1,100	13	6	2	1 in 58	1 in 550
Grand total.....		95,261	693	335	137	1 in 93	1 in 695

In Table III. will be seen not only the proportion of arrivals by the several lines of steamers at the same port, but also a comparison of the arrivals and detentions at different seaports. It will be observed that the detentions during the winter season at Halifax of passengers per Allan Steamship Company are larger than at Quebec, though there were but few rejections. The difference is due to the fact that a relatively larger number of continentals arrive in winter, often suffering from conjunctivitis which under treatment becomes readily curable. The Dominion Steamship line shows a notably greater number both of detentions and rejections at Quebec and Halifax than any other company, the average detentions being 1 in 65, and rejections 1 in 360. The Canadian Pacific Railway Steamship Company has shown a remarkable improvement in the last year, both in the number detained and the number debarred. Thus while in 1905-6 1 in 43 was detained and 1 in 221 deported, the present year shows 1 in 113 detained and but 1 in 806 debarred, almost reaching the previous high standard of the Allan Steamship Company. Remembering that this includes steamers from Antwerp carrying continentals only, the fact is most gratify-

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ing, as showing what constant medical inspection before embarkation is capable of accomplishing.

The Donaldson Steamship Company, which last year took up immigration work for the first time, bringing passengers from Scotland, shows fewer detentions than any other line, though rather more rejections. The average detentions being 1 in 93, and the average rejections 1 in 695 for all lines have shown a lessening of almost 22 per cent over 1905-6 in the detentions and of 44 per cent in the deportations.

Year.	Total Examined.	Total Detained.	Total Debarred.
1905-6	140,224	1 in 73	1 in 387
1906-7	95,261	1 in 93	1 in 695

The differences which exist in immigrants, and the conditions under which they come to Canada are very well illustrated from the figures in the following table:—

TABLE IV.

STATEMENT showing the number of immigrants detained and debarred from Montreal, Vancouver, Victoria, North Sydney and New York for the Fiscal Year 1906-7 (9 months).

Port of Entry.	Port of Arrival.	Total Arriving.	Total Detained.	Total Deported.	Total Released.	Still in Hospital.
Montreal	(Philadelphia	120	208	11	175	22
	Baltimore	156				
	Portland	2,508				
	Boston	625				
	New York	9,802	50	50		
North Sydney	New York	as above.				
Vancouver	North Sydney	1,387	718	139	560	19
Vancouver	Vancouver	5,160				
Victoria	Victoria	4,583				
	Totals	24,341	2,515	303	2,167	45

The total arrivals at United States ports, given above, 13,211, include all immigrants who entered Canada at Montreal and were again inspected there, as well as any who may have entered at Cornwall, Prescott and Niagara Falls, and were not re-inspected except by Customs officers. The regular inspection at North Sydney was instituted in March, 1907, and includes persons inspected for only that month.

As mentioned in last year's report, arrangements exist whereby a medical officer of this department is provided with all facilities at Ellis Island, New York, for obtaining accurate statistics of all Canadian-bound immigrants arriving there and at the several other United States Atlantic ports, and of dealing with the cases of any who, on inspection, are detained by United States immigration officers. Of a total of 9,802 entering via New York, 50 were debarred as ineligible for admission to Canada, while of the total allowed admission to the United States and transit to Canada 208 were detained on inspection at Montreal and 11 were rejected.

Whatever the reason, it appears that of the immigrants coming to Canada via the United States, 1 in 51, or nearly twice as many were detained, and 1 in 216, or three times as many were deported proportionately as by Canadian Atlantic ports, suggesting either a stricter inspection or, what is actually the case, a greater number of continentals as coming via the United States ports.

Thus of the 13,211 immigrants arriving at United States ports, the Italians number 3,976 in a total of 5,114 arrivals in Canada; the Austro-Hungary group 1,540 in 4,045; the Hebrews 1,191 in 6,584; the Germans 691 in 1,903, while of 55,791 British only 2,968 entered by these ports.

A much more remarkable situation appears regarding detentions, when we turn to the Pacific coast arrivals. The very large number of vessels touching at Victoria has already been mentioned, including not only coastwise from the United States, but

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also vessels from Japan, China, Australia and Honolulu, whether bound to Vancouver or Puget Sound ports. These include regular passenger vessels, carrying tourists and latterly some immigrants from the United States, but very frequently persons of the tramp class are found. The vessels from Asiatic ports have always a limited number of tourists as saloon passengers, and in addition steerage passengers almost wholly Chinese returning on certificates, and Japanese and Hindoos. Recently a number of Japanese have been arriving at Victoria from Honolulu, whose final destination is the United States.

TABLE V.

STATEMENT by nationalities of number of immigrants debarred admission to Canada during the Fiscal Year 1906-7 (9 months).

Nationality.	Total Arrivals.	ATLANTIC PORTS.		PACIFIC PORTS.		TOTALS.		Totals.
		For Canada.	For U.S.A.	For Canada.	For U.S.A.	For Canada.	For U.S.A.	
Austrian, N.E.S.	562	1		1		2		2
Galician	1,632	6				6		6
Magyar	347	3				3		3
Ruthenian	303	2				2		2
Slovak	146	3				3		3
Chinese	92			1		1		1
French	1,314	4	1			4	1	5
German, N.E.S.	1,889	2				2		2
English	41,156	42	2	2		44	2	46
Scotch	10,729	6				6		6
Irish	3,404	4		1		5		5
West Indian	64	1				1		1
Greek	545	1				1		1
Hebrew, N.E.S.	544	1				1		1
" Russian	5,802	24	3			24	3	27
Italian	5,114	29	1			29	1	30
Japanese	2,042			99	1	99	1	100
Poles, N.E.S.	144	2	1			2	1	3
" Austrian	375	1				1		1
" Russian	492	6	4			6	4	10
Roumanian, N.E.S.	431	1				1		1
Russian, N.E.S.	1,927	15	15	1		16	15	31
Fins	1,049		3				3	3
Icelandic	46		4				4	4
Swedes	1,077	4				4		4
Turks, N.E.S.	232	3				3		3
Armenians	208	2				2		2
Syrians	277	1				1		1
From U.S.A.	34,659			17		17		17
India	2,124			119		119		119
Totals.	118,746	164	34	241	1	405	35	440

This table, always interesting to the casual reader, is important, not only in indicating results compared with previous years, but also the degree to which the various peoples are impressed with the restrictions placed upon undesirable immigrants. As remarked in previous years, of the total number, those destined to the United States show the proportionately largest number, there being 34 in a total of 198 at Atlantic ports, as compared with 164 destined for Canada, while the total immigrants destined to the United States were 17,887 as compared with 101,715 to Canada. The number of British debarred at Atlantic ports was 54, or 1 in 1,033, as compared with 1 in 1,669 in 1905-6. This increase, as compared with last year of 3 to 2 in British rejections, is very worthy of note, since it has been the rule that the larger the total immigration of any class, the proportion detained is fewer, and British immigration has been greater than for the same period of the previous year. The English rejections were as 1 in 935; the Scotch as 1 in 1,788, and the Irish as 1 in 851.

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Of the total 34,217 from continental Europe 144, or 1 in every 237 was debarred, as compared with 1 in 104.3 last year.

The change is a very remarkable one, since while medical inspection is ever increasing in strictness, the continentals have fewer rejections by more than one-half. Thus in 4,045 of the Austro-Hungary group, 15, or only 1 in 270, were debarred as compared with 1 in 116 last year. Of the French and Belgians, 5 were deported, or 1 in 392, and of 4,199 German and Scandinavian and Danish, 10 were deported, or 1 in 420. In 5,144 Italians 30 were deported, or 1 in 170, while of 6,584 Hebrews 28 were debarred, or 1 in 235. Of the 1,293 Greeks, Syrians, Turks, Arabians and Armenians 7 were debarred, or 1 in 184.

Regarding the detained or debarred at the Pacific coast the following table will be of interest:—

TABLE VI.

STATEMENT showing the total number of Chinese, Japanese, Hindoos detained and debarred at the ports of Vancouver and Victoria during the Fiscal Year 1906-7 (9 months).

Nationality.	Total No. Arriving.	Detained.	Released.	Debarred.
Vancouver—				
Chinese.....	66	87	87	.....
Japanese.....	526	154	91	51
Hindoos.....	1,609	468	382	79
	2,201	709	560	130
Victoria—				
Chinese.....	22	98	97	1
Japanese.....	2,656	1,386	1,333	49
Hindoos.....	508	40	.....	40
	3,186	1,524	1,430	99

The number 88 represents the number of Chinese arriving in Canada for the first time via Pacific ports, and who either paid the \$500 tax or were exempt under the Act, but each year a considerable number of Chinese resident in Canada visit China on permits, and on their return to Canada may require treatment or even deportation. At Victoria it appears 1 in 2 was detained and 1 in 35 debarred, and at Vancouver 1 in 3 was detained and 1 in 17 debarred.

In the above table, the number of Chinese detained is larger than the total Chinese immigration, this is explained by the fact that many of the Chinese detained were in Canada before, hence are termed returned Canadians.

The foot note explains regarding the Chinese detained and debarred, while the fact that 1 in every 2 Japanese was detained at Victoria and 1 in 54 deported, and at Vancouver 1 in 3 detained and 1 in 10 deported indicates not more the exactness of inspection than the need for every precaution being taken to prevent the entry of what evidently is on the whole an inferior type of immigrant. As many of those landing at Victoria have the United States as their final destination, it is possible that some greater precautions are taken that trachoma cases as such do not embark, since they are examined at Hong Kong by United States medical officers, and the fact that so many are detained at the ports indicates the tendency before commented upon to the development of ophthalmia during the long sea voyage, owing often to overcrowding and exposure to foul and infected air in the holds of the ships, to common washing utensils and infected towels.

THE IMMIGRANT HOSPITALS.

This term has been a common one at the several seaports, but the hospital idea has so completely replaced that of detention that the expression immigrant hospital more

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properly indicates their character. The establishment of these under departmental control began at Quebec in 1904, and was followed in November, 1904, by one at St. John; in March, 1905, by those at Halifax and Montreal, and in April, 1906, by that at Vancouver; while private boarding houses have been utilized for the time at Victoria, until the new building now under construction is completed. What has been the extent of the work done in them is illustrated by the following table:—

TABLE VII.

STATEMENT giving the diseases and other causes for which immigrants were detained at the ports of entry, Quebec, Montreal, Halifax, St. John, Victoria, Vancouver and New York during the Fiscal Year 1906-7 (9 months).

Class of Disease.	Cause of Detention.	Number Detained.	Number Released.	Number Deported.	Still in Hospital.
I. Contagious diseases.....	Chicken pox.....	1	1 (1 died)		
	Typhoid fever.....	1	1		
	Mumps ..	1	1		
	Measles.....	4	4		
	Totals.....	7	7		
II. General diseases.....	Lupus.....	3		3	
	Tuberculosis.....	12	5	6	1
	Alcoholism.....	1	1		
	Delirium tremens.....	3		3	
	Rheumatism.....	2	1	1	
	Malarial fever.....	1			1
	Fever.....	3	3		
	Totals.....	25	10	13	2
III. The eye.....	Trachoma.....	991	766 (1 died)	176	49
	Conjunctivitis.....	1,793	1,756	10	27
	Ulcer of eye.....	1	1		
	Cataract.....	1		1	
	Ophthalmia neonatorum.....	1	1		
	Blind.....	3	2	1	
	Partially blind.....	12		12	
	Totals.....	2,802	2,526	200	76
IV. Nervous system.....	Spinal disease.....	1		1	
	Paralysis.....	7	5 (1 died)	2	
	Convulsions.....	3	3		
	Apoplexy.....	1	1		
	Feeble minded.....	8	4	4	
	Melancholia.....	1		1	
	Hysteria.....	1	1		
	Insane.....	15	13		2
	Epilepsy.....	3		3	
	Pott's disease.....	1		1	
	Paralysis of leg.....	1	1		
	Totals.....	42	15	25	2
V. Circulatory System.....	Heart disease.....	1		1	
VI. Respiratory system.....	Bronchitis.....	4	4		
	Pneumonia.....	1	1		
	Empyema.....	1		1	
	Chronic pleurisy.....	1		1	
	Totals.....	7	5	2	

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Class of Disease.	Cause of Detention.	Number Detained.	Number Released.	Number Deported.	Still in Hospital.
VII. Digestive system....	Hernia	5	1	4	.....
VIII. Genito-urinary system....	Syphilis.....	2	.....	2	.....
IX. The skin.....	Favus	9	7	2	.....
	Alopecia.....	2	2	.....	.....
	Erysipelas.....	1	1	.....	.....
	Scabies.....	1	1	.....	.....
	Eczema	1	.....	.....	1
	Abscess on face.....	1	1	.....	.....
	Tinea (Ring Worm).....	3	2	.....	1
	Tubercular adenitis	2	.....	1	1
	Totals.....	20	14	3	3
X. Locomotor system.....	Muscular atrophy	1	.....	1	.....
XI. Malformation — diseases of old age and infancy	Deaf.....	3	3	.....	.....
	Cripple	1	.....	1	.....
	Senility and debility	20	13	4	3
	Deaf and dumb.....	6	1	5	.....
	Hunchback	2	2	.....	.....
	Lame	1	1	.....	.....
	Rickets	1	.....	.....	1
	Old age	1	1	.....	.....
	Totals.....	35	21	10	4
XII. Accidents.....	Sprained muscle of groin	1	1	.....	.....
	Lost fingers and toes.....	1	.....	1	.....
	Totals	2	1	1	.....
XIII. Ill-defined causes.....	Poor physique.....	7	4	3	.....
	Nervous disease.....	2	1	1	.....
	Totals	9	5	4	.....
XIV. Other causes.....	Accompanying patients	213	(1 died) 190	19	4
	Likely to become a public charge ..	159	69	90	.....
	Criminals.....	11	2	9	.....
	Traumatic lameness.....	1	1	.....	.....
	For safe-keeping	4	4	.....	.....
	Suspected immoral.....	4	4	.....	.....
	Stowaway.....	18	11	.....	.....
	Prostitute.....	8	.....	8	.....
	Ran away from wife.....	1	.....	1	.....
	" " father	2	.....	2	.....
	Eloped.....	2	.....	2	.....
	Held for bond.....	1	1	.....	.....
	For further observation	8	.....	8	.....
	Waiting for tickets	3	3	.....	.....
	" situation	94	94	.....	.....
	To observe mental condition.....	1	1	.....	.....
	Pediculosis	1	1	.....	.....
	To observe eyes.....	16	16	.....	.....
	Bad character	30	1	29	.....
	Artificial foot	1	1	.....	.....
	Opium fiend.....	3	.....	3	.....
	Procurer.....	1	1
	Degenerate.....	3	3
	Totals	585	407	174	4
	Grand totals.....	3,543	3,012 (4 died)	440	91

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Reference to the reports of the United States Immigration Service will show that the practice in our hospitals varies somewhat from that in the United States hospitals. The Canadian Act provides conditionally that otherwise desirable immigrants suffering from some curable disease may be detained for treatment. The Act of the United States not only excludes persons suffering from loathsome or contagious diseases of a chronic type, but further levies a fine upon the vessel carrying them, if there is reasonable ground to suppose the disease could have been detected before embarkation. However, contagions contracted on shipboard and individuals suffering from some malady and who are related directly to some person already admitted, and who has applied for citizenship are landed for treatment and examination, and if it is determined that the disorder is easily curable, are admitted for treatment. However, in all their main features the two Acts are the same as regards dealing with disease.

'No immigrant shall be permitted to land in Canada who is feeble-minded, an idiot or an epileptic, or who is insane or has had an attack of insanity within four years' is the wording of section 26 of the Canadian Act of 1906, and its words are almost duplicated in the United States Act. Greater flexibility exists in the second portion of the same clause which excludes 'all deaf and dumb or dumb or blind or infirm unless accompanied by friends' or coming to friends who are willing or able to be responsible for their maintenance. It naturally results from these clauses that a notable number are yearly debarred, but who for sometimes considerable periods are detained in hospitals in the absence of other convenient place. The hospitals have also been the temporary place of detention of persons about to be deported from even other causes than disease.

As compared with 1905-6 and its 3,570 detentions, there were detained 3,543 during the nine months of the present fiscal year, so that for a full year the number would be notably above that of the previous year. Thus unequal detentions at different ports have been already adverted to.

Turning to the causes for which immigrants were detained, it is pleasing to note the very remarkable freedom from any acute or contagious disease which might have broken out during detention at the hospitals. In all there were only 7 as compared with 22 last year; there being 25 detentions of Class II. compared with 7 last year. Of these 3 were lupus or tubercular disease of the face, with 12 others, making in all 15 tubercular cases as compared with 4 last year. This is a matter of much importance as illustrating the increasing care being taken to prevent the introduction into Canada of further cases of this most serious disease.

Remembering that the immigrants are examined in groups often of 1,000 and over, and that as many as 7,000 have arrived in a single day, it will be understood that no attempt is made to make a clinical examination of persons who are not obviously in poor health. How a tuberculized person told to keep on deck in the fresh air, should with sunburning and an appearance of ruggedness be overlooked will readily be understood, when the medical statistics of sanatoria and hospitals for consumptives show that in a group of consumptives an average of 8 months have elapsed before tuberculosis is actually diagnosed in patients. That such an average length of time should be present in the class of persons who emigrated to Canada may well be expected from the following analysis of cases which became inmates of Muskoka or Toronto sanatorium under the management of the National Sanitarium Association, and which were made the occasion of a memorial of the Toronto and Montreal Boards of Trade to the government of Canada. It may be stated that the moment that the memorial of the Toronto Board of Trade appeared, I communicated with the medical officers in charge of those institutions in one case personally, and in the other by correspondence. After quoting from the memorial which states that 'of 243 patients in the Muskoka Sanatorium 83 were foreign born,' my letter says: 'I, therefore, shall take it as a favour if you will supply, as far as possible, details regarding the individuals treated, in order that the department may be in a position to follow up in the manifests containing all the immigrants, the ship-

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ping company which brought each patient, the port at which they arrived, the medical officer on duty and any other facts which may be of importance in the investigation.' In the case of the Toronto institution the medical officer wrote sending a list of 8 inmates who had been in Canada less than two years, and a month later the secretary of the association sent a tabulated statement giving a total of only 15 cases from both or all the institutions that could in any way be classed as recent immigrants. My report made regarding these cases says: 'An analysis of the 15 cases whether resident in the Muskoka Sanatorium or that at Toronto, gives no evidence in any case other than Nos. 4, 7, 10 that the individual was tuberculized at the time of admission to Canada, and evidently was not in such an advanced stage of the disease as could have been diagnosed in any way other than more than ordinarily close examination. Though there is no evidence on the point, it is probable that number 3 was tuberculized on his arrival in Canada, as he seems to have been admitted shortly thereafter into the hospital. No. 7 came to her husband who had been some time in Canada; No. 10 came to her husband who had been in Canada some time, and who has regular employment, and has made a good home for his wife. This woman may have been slightly tuberculized on arrival, but certainly not to a degree that could have been readily diagnosed, since she came in May and in January is reported to be slightly diseased. Therefore, it appears that at most two of the list were sick enough to be possibly detected by the medical officer at the port of arrival, while of the total fifteen cases, six are reported to have come to the country in 1905, or some two years before their admission to the hospital.'

When, however, it is remembered that the annual death rate in urban populations in both Europe and America from tuberculosis varies from 1.5 to 2.5 per 1,000, it is not to be supposed 221,276 immigrants could, as they did, enter Canada in 1905-6 and 1906-7 from Europe without their quota of tuberculized persons. If to the 12 rejected at the seaports (3 in 1905-6 and 9 in 1906-7) on account of tuberculosis during this period are added the 8 deported in 1905-6 and the 15 in 1906-7, we have a total of 35 tuberculized persons, or actually .16 per 1,000 who were not admitted or were sent out of Canada, to which may further be added 1 who died in an immigrant hospital and was never admitted, and 5 who though diagnosed on arrival were allowed to go to their families who were found able and willing to care for them, and who had already become residents of Canada.

Class III. contains the principal number of cases detained, 2,802 being all diseases of the eye, of which 991 were trachoma, and of which nearly 18 per cent were deported. This disease always preceded by a conjunctivitis more or less acute has greatly decreased in prevalence at Atlantic seaports, in part probably from a lessened prevalence in the countries where the immigrants come from, and in part from the strict medical examination by port officers and those of the steamship companies at ports of embarkation. The larger number of cases during the present year occurred at the Pacific seaports.

Class IV. This class which includes all nervous diseases is marked by a very considerable increase for the nine months; there being 42 detentions as compared with 28 in the previous year. Remembering that there were but 90,008 immigrants inspected at the ports in the year as compared with 131,268 in 1905-6, it means that in the year almost 1 to 2,000 immigrants was detained on account of nervous disease, as compared with 1 in 4,688 in the previous year, and 13 insane were debarred that year as compared with 4 in the previous year.

Classes V. and VI. show remarkably few detentions, and the same may be said of Class VII. Diseases under Class VIII. are not liable to be diagnosed except when coming under Class IX. The cases under this latter class have been few and mostly are found to have been cured favus.

Class XI. naturally includes a very considerable number since in it are placed those who through hereditary or other early causes are defectives or who have become so through old age or through accident. Few of them ought to arrive at the seaports

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if proper inspection is carried out before embarkation, as the defects are mostly quite obvious; but it often becomes a delicate question to decide whether, in the instance of some natural defect, which has been overcome in part by education, as in the case of the dumb or maimed, the person has not been brought within the category of desirable immigrants; moreover, many come as children, members of a family able to support them, and whose general well-being indicates the absence of degeneracy, and signifies that the defective has suffered some congenital or other accidental injury. Of the 35 such detained 10 were debarred an entry.

Class XIV. which includes all others who were inmates of the hospitals is interesting as indicating the many questions which have to be considered in the inspection of immigrants. The children of persons detained on account of some member of a family being diseased, form a large number, there being 213 detentions. The 159 detained as likely to become a public charge are very frequently medical cases, since their physical and mental ability is largely a determining factor. Of 159 detained 90 were rejected. Criminals frequently come under the same category and often as physical and mental degenerates have developed the immoral traits which have placed them in the criminal class. They include here 11 criminals, 4 suspected immoral, 8 prostitutes, 30 of bad character, 1 procurer, 3 degenerates, 2 elopers. Altogether there were 585 in this class of whom 174 were debarred.

Selecting from Classes IV., XIII. and XIV. those cases in which the element of moral character largely enters, it is gratifying to think that including the insane and other nervous cases 176 cases were excluded from Canada during the past nine months, who if admitted would have added a very notable number to the permanent population of either our asylums, prisons or charitable institutions.

TABLE VIII.

STATEMENT showing total earnings, receipts and total expenses of daily maintenance of immigrant hospitals for Fiscal Year (9 months).

Port.	Nine Months to March 31, 1907.	Days in Hospital.	Rate per Day.	Total Earnings.	Total Receipts.	Total Expenditure
			Cents.	\$ cts.	\$ cts.	\$ cts.
Quebec	1906-7	5,759	75	4,319 25		
"	1906-7	3,087	50	1,543 50	5,407 38	12,580 97
Halifax	1906-7	3,902	75	2,926 50		
"	1906-7	200	50	100 00	2,726 49	5,238 10
St. John	1906-7	1,052	75	789 00		
"	1906-7	383	50	191 50	4,208 50	1,786 39
Montreal	1906-7	2,994	75	2,245 50		
"	1906-7	674	75	505 50		
"	1906-7	776	50	388 00	1,646 50	3,778 33
Vancouver	1906-7	7,897	75	5,922 75		
"	1906-7	814	50	407 00	8,935 50	4,873 34
Victoria	1906-7	9,244	35	3,235 40	3,235 40	1,325 54
Totals		36,782		22,573 90	26,159 77	29,582 67

Of the earnings of the hospital at Montreal \$505.50 is charged against the department for maintenance of deports detained there awaiting sailings, and another amount chargeable against the New York Central Railway, which so far has paid no accounts. It will be noted that the amounts received at several hospitals are more than those earned. This is, of course, due to payments deferred by companies due from the previous year.

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TABLE IX.

STATEMENT showing the number, nationality and causes for which immigrants admitted to Canada were deported after admission to Canada during the Fiscal Year 1906-7 (9 months).

Nationality.	Whence sent for Deportation.	Male.	Female.	Class of Disease.	Cause of Deportation.
<i>Deported at St. John.</i>					
English.....	Winnipeg.....	2	...	General diseases.....	Tuberculosis.
".....	Toronto.....	1	...	".....	"
Dane.....	Winnipeg.....	1	...	".....	"
English.....	".....	4	...	".....	Rheumatism.
".....	Toronto.....	1	...	".....	"
Irish.....	Winnipeg.....	2	...	".....	"
English.....	".....	3	...	Eye diseases.....	Failing eyesight.
".....	".....	3	...	Nervous diseases.....	Insanity.
".....	London.....	12	...	".....	"
".....	Strathroy.....	1	...	".....	"
".....	Toronto.....	2	...	".....	"
".....	Hamilton.....	1	...	".....	"
".....	Montreal.....	1	...	".....	"
".....	Edmonton.....	1	...	".....	"
Welsh.....	Montreal.....	1	...	".....	"
Irish.....	Toronto.....	1	...	".....	"
Scotch.....	".....	1	...	".....	"
".....	Winnipeg.....	1	...	".....	"
Galician.....	".....	1	...	".....	"
English.....	".....	2	...	".....	Physically and mentally weak.
".....	".....	1	...	".....	Epilepsy.
".....	".....	2	...	Circulatory system.....	Heart disease.
".....	".....	1	...	".....	Empyema.
French.....	".....	1	...	".....	Varicose veins.
English.....	Cornwall.....	1	...	The skin.....	Ulcer on leg.
".....	Winnipeg.....	1	...	Locomotor system.....	Locomotor ataxia.
".....	".....	2	...	Malformation, &c.....	Deaf and dumb.
".....	Toronto.....	1	...	".....	Twisted neck and head.
".....	St. John.....	1	...	".....	Cripple.
".....	Winnipeg.....	1	...	Old age.....	Old age.
".....	".....	1	...	Ill-defined causes.....	Physically unfit.
Scotch.....	".....	1	...	".....	"
English.....	Toronto.....	1	...	Accidents.....	Lost eye and thumb, feeble.
".....	Winnipeg.....	1	...	Other causes.....	Accompanying patients.
".....	London.....	1	5	".....	"
".....	Toronto.....	3	2	".....	"
Scotch.....	".....	2	...	".....	"
English.....	Winnipeg.....	3	3	".....	Likely to become a public charge.
".....	U. S. A.....	3	...	".....	"
".....	St. John.....	1	1	".....	"
Swede.....	Winnipeg.....	2	...	".....	"
English.....	".....	2	...	".....	Criminal.
".....	Toronto.....	1	1	".....	"
".....	Montreal.....	1	...	".....	"
".....	Quebec.....	1	...	".....	"
Italian.....	".....	1	...	".....	"
English.....	".....	1	...	".....	Pregnant.
".....	Winnipeg.....	1	...	".....	Immoral.
Scotch.....	".....	1	...	".....	Vicious tendencies.
<i>Deported at Montreal.</i>		62	20		
English.....	Winnipeg.....	4	...	General diseases.....	Tuberculosis.
".....	Montreal.....	2	1	".....	"
".....	Ottawa.....	1	...	".....	"
Galician.....	Winnipeg.....	1	...	".....	"
Swede.....	".....	1	...	".....	"
U. S. Citizen.....	Montreal.....	1	...	".....	"
English.....	Winnipeg.....	5	...	".....	Rheumatism.
Hebrew, N.E.S.....	".....	1	...	".....	"
French.....	".....	1	...	".....	"
Irish.....	Montreal.....	1	...	".....	Alcoholism.
".....	Ottawa.....	1	...	".....	"

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Nationality.	Whence sent for Deportation.	Male.	Female.	Class of Disease.	Cause of Deportation.
<i>Deported at Montreal—</i>					
<i>Con.</i>					
English.	Port Arthur.	1		Eye diseases.	Failing eyesight.
"	Winnipeg.	8	1	Nervous diseases.	Insanity.
"	Kingston.	1		"	"
"	Montreal.	6	3	"	"
"	Toronto.	4	1	"	"
"	Hamilton.	2		"	"
"	Penetanguishene.	1		"	"
Scotch.	Montreal.	1		"	"
Irish.	"	1	1	"	"
"	Quebec.	1		"	"
Hebrew, N.E.S.	Winnipeg.	1		"	"
Galician.	Halifax.		1	"	"
U S. Citizen.	New Westminster.	3		"	"
"	Montreal.	1		"	"
Swede.	Toronto.	1		"	"
Galician.	Bracebridge.	1		"	"
Scotch.	Montreal.	1		"	"
English.	Winnipeg.	1		"	"
"	Hamilton.	1		"	Epilepsy.
"	Winnipeg.	1		"	"
"	Cobourg.		1	"	Physically and mentally weak.
"	Winnipeg.	1		Circulatory system.	Varicose veins.
"	Montreal.	1		Digestive system.	Chronic dysentery.
"	Winnipeg.	1		Genito-urinary system.	Diabetes.
"	"	1		"	Bright's disease.
"	"	1		The skin.	Ulcer.
"	Montreal.	1		"	Abscess.
"	"	1		Malformation, &c	Cripple.
Welsh.	"	1		"	"
Russian Hebrew.	Winnipeg.		1	Old age.	Old age.
Hungarian, N.E.S.	"	1		Malformation	Cripple.
English.	Cornwall.	1		Accidents	Frost bites.
"	Ottawa.	1		"	Lead poison.
"	Winnipeg.	6	4	Other causes.	Accompanying patients.
"	Montreal.	1		"	"
"	Ottawa.	3	6	"	"
Scotch.	Montreal.	1		"	"
English.	Ottawa.	1	1	"	Likely to become a public charge.
"	Winnipeg.	2		"	"
"	Toronto.	2	3	"	"
Scotch.	Goderich.	1		"	"
English.	Lachute.	1		"	Pregnancy.
"	Montreal.	1	1	"	Criminal.
Totals.		82	29		
<i>Deported at Quebec.</i>					
Irish.	Quebec.		1	Nervous system.	Insane.
English.	Stanstead.		1	Other causes.	Pregnancy.
Totals.			2		
<i>Deported at Halifax.</i>					
English.	Toronto.	1		Nervous disease.	Insane.
"	Penetanguishene.	1		"	"
"	New Westminster.	1		"	"
Scotch.	Toronto.	1		"	"
"	"	1		Other causes.	Bad character.
Finn.	Halifax.	1		"	Pregnancy.
Totals.		3	3		
Grand totals.		147	54		

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This Table IX. shows the fate, so to speak, of the unfortunates in the great stream of favoured people who have found their way to a new home in Canada. In all 201 have been sent out of Canada for some cause, of whom 157 were English, 8 Irish, 12 Scotch, and of the others Galicians 4, French 2, Swedish 4, Italian 1, from the United States 5, Hebrew 3, Hungarian 1, Finnish 1, Danish 1, and Welsh 2.

Out of the 201 only 66 arrived during the nine months ending March 31, 1907, and of this number 51 were English, 6 Scotch, 5 Irish and 1 each of Welsh, Finnish, French and Swedish.

By sending copies of the amended Immigration Act to all asylums and other public institutions, as prisons and charitable institutions, and a circular letter requesting them to communicate to the Minister of the Interior the facts regarding any inmates who were recent immigrants, it has been possible to return to their homes a considerable number who had become public charges in some institution, whether insane, criminal or charitable. The distribution of these by provinces and by years of admission to Canada is neatly shown in the following table:—

TABLE X.

STATEMENT showing the number and year of admission to Canada of insane and other persons deported from Canada in 1906-7.

Province.	Year of arrival.					Date unknown.	Total No. Deported.	No. of insane Deported.
	1903.	1904.	1905.	1906.	1907.			
Lower Provinces.				3	2		5	1
Quebec.	2		4	30	1		37	18
Ontario.	1		21	43	2		67	22
Manitoba.		2	5	77			84	16
Alberta.			1				1	1
British Columbia.				2		2	4	4
U.S.A. via Canada.				3			3	
Totals.	3	2	31	158	5	2	201	62

In the instance of insane and tuberculized persons deported every care is taken that these are not only cared for *en route*, but further that they are met by a Canadian officer on their arrival at the foreign port and transferred to their friends or to some institution with which arrangements have been made for their reception. It has further been found especially in the case of the tuberculized that the relatives in Britain are willing and at times anxious to have their friends returned, so that perhaps the word returned applied to them appears better than deported in such instances. The chief point is that the care and maintenance of these people is placed where it properly belongs, in the same manner as the poor law guardians of a district in England must be responsible for the care of their own poor, and not unload them upon another municipality.

It will have been noted in the previous table that the Scandinavian people stood high in the number of deportations, and the following table giving the total deportations for three years shows that it is not an accident of the present year:—

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TABLE XI.

STATEMENT showing the number and nationality of immigrants deported after admission to Canada during the three Fiscal Years 1904-5-6-7.

Nationality.	Total No. Arriving.	Deported.	Ratio of Deported to Number arriving.
Icelander.....	627	5	1 in 125
Danes.....	1,232	6	1 in 205
Welsh.....	2,069	6	1 in 345
English.....	155,138	313	1 in 496
Swedes.....	4,726	9	1 in 525
Norwegian.....	3,688	7	1 in 527
Poles, N.E.S.....	546	1	1 in 546
Hebrew, N.E.S.....	2,275	4	1 in 569
Finn.....	3,475	4	1 in 869
Irish.....	12,420	13	1 in 955
Dutch.....	1,064	1	1 in 1,064
Hungarian, N.E.S.....	2,219	2	1 in 1,109
French.....	4,705	4	1 in 1,176
Galician.....	14,234	10	1 in 1,423
Newfoundlander.....	1,559	1	1 in 1,559
Scotch.....	38,319	23	1 in 1,666
Russian, N.E.S.....	6,995	3	1 in 2,332
Belgian.....	2,552	1	1 in 2,552
Austrian, N.E.S.....	2,723	1	1 in 2,723
Russian Hebrew.....	18,064	3	1 in 6,021
German, N.E.S.....	6,338	1	1 in 6,338
Italian.....	16,546	1	1 in 16,546
From United States.....	136,319	5	1 in 27,263
Totals.....	437,833	424	1 in 1,033

While it is apparent that the number in some instances is too small to draw conclusions from, yet, several nationalities show continued freedom from deported cases. For instance only 1 Italian was deported this year as a criminal, and none in either previous year, although there were 16,546 Italian immigrants in the three years. Evidently they are remarkably free from insanity and tuberculosis, and in the latter cases this may be due to their outdoor life in sunny Italy. While the people of the United States stand first in the list as regards freedom from deportation, it will be understood that their being mostly agriculturists in the Northwest, and having resources will prevent their defectives from becoming, to a large extent, a burden upon the public. It is probable too that the remarkable interest and care taken by the Russian Hebrews for their own people is an explanation in part of the few deported; but it is probable that the fear of a forced return to Russia is an impelling force preventing their sick from becoming dependent inmates of public institutions.

The points from which immigrants were returned, indicate how general is becoming the knowledge of the Act providing for their deportation. Thus 84 were sent from Winnipeg, 31 from Toronto, 30 from Montreal, 14 from Ottawa, 8 from London, 5 from Quebec, 4 from New Westminster, 4 from Hamilton, 3 each from St. John and from U.S.A. via Canada, 2 each from Penetanguishene, Halifax and Cornwall, 1 each from Stanstead, Lachute, Goderich, Strathroy, Edmonton, Port Arthur, Kingston, Bracebridge and Cobourg.

One of the satisfactory features of this extended work of inspection, detention and deportation of immigrants, is the relatively small cost at which the service is carried on. Apart from the salaries of medical inspecting officers, at the ports, the hospital earnings fairly well maintain the hospital expenditure, although it is apparent that at the present rates charged the steamship companies, the fewer the

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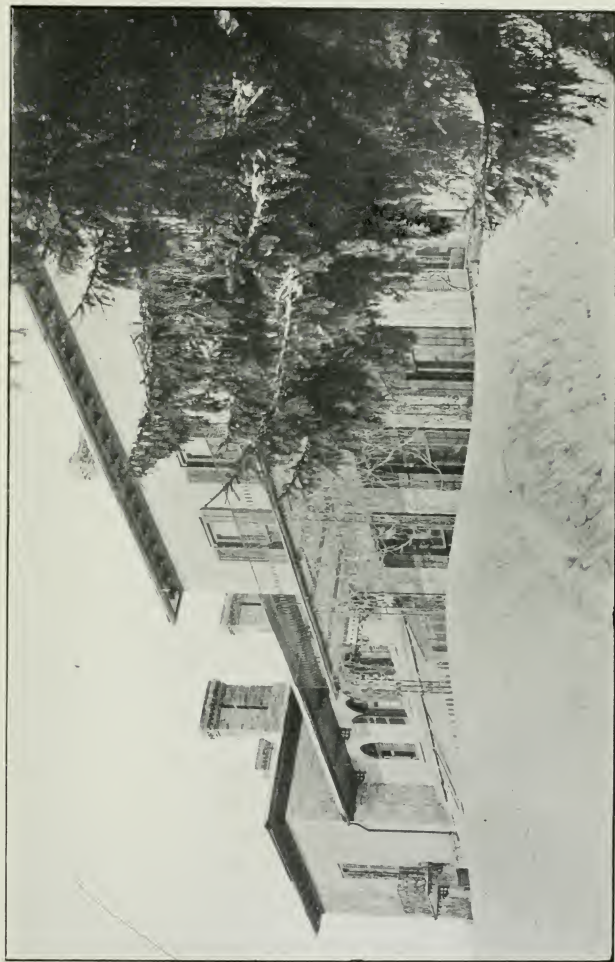
patients, the less funds will there be to maintain expenditures. It must, however, always mean an armed peace, since the more strict the examination, the fewer will be those embarking who are liable to exclusion, while laxity will always mean the coming of more undesirables. It is like all good preventive sanitary work, it is being best done when there is least for it to do.

Reviewing the work of medical inspection carried on in its varied divisions during the fiscal year, which for the nine months has had flowing into Canada the largest number of immigrants which has ever entered the country, one naturally attempts to estimate its effects upon the physical, mental and moral health of the Canadian people. It must be apparent from the illustrative tables that it is amongst the ruder classes of immigrants from the least advanced countries of Europe that we find the fewest cases of those constitutional diseases, which especially mark the peoples where life is strenuous because largely urban, though the former may be more liable to the acute contagions. So that in so far as such are industrious, and especially are agricultural, it would seem as if from the physical standpoint Canada is distinctly the gainer by their advent. Observing further the enormous influx of British, whether English, Scotch or Irish, inspecting them on arrival, whether as second-class or steerage, and noting moreover with constantly increasing strictness that each season is finding fewer to be detained, there seems but one conclusion to be arrived at, which is to the effect that whether compared with those entering the United States or those crossing into Great Britain from the continent, Canada is to-day absolved not only from the accusation that she is the recipient of undesirables not admissible elsewhere; but further that she is receiving and welcoming more largely than ever a population whether from Great Britain or the United States, who will mingle at once with our own people, adapt themselves to our employments, customs and laws, and who are being absorbed so rapidly into our several communities that a few years only will have passed, when as in the Northwestern States with their 60 per cent of a population alien either actually or by immediate descent, they will be known only by their industry, success and good citizenship, be amenable to the laws of the country, proud of her history and traditions and loyal, enthusiastic supporters of her institutions and labouring to realize to the fullest, the splendid promise of the country of their adoption.

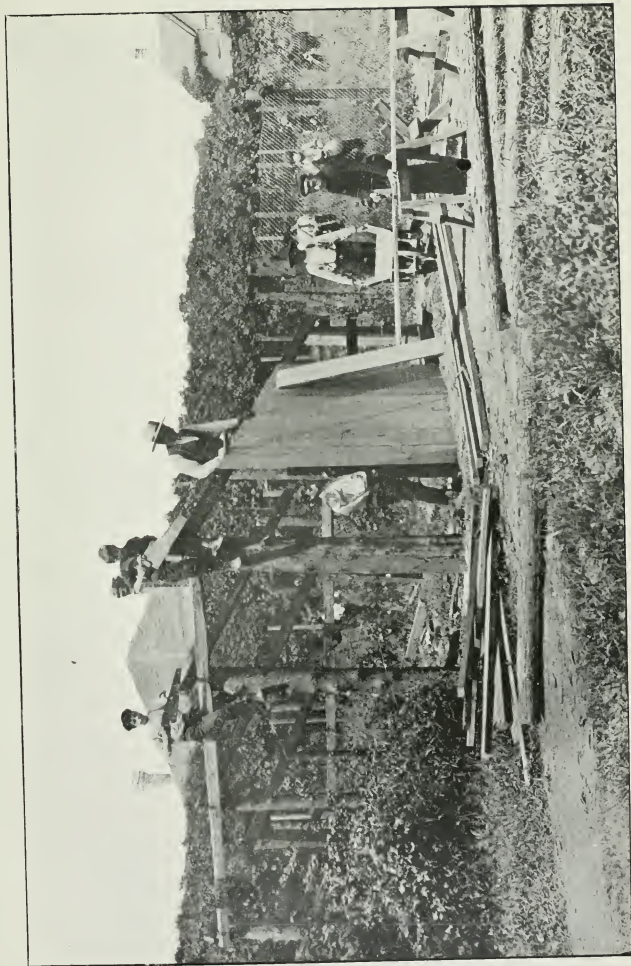
Respectfully submitted,

P. H. BRYCE,

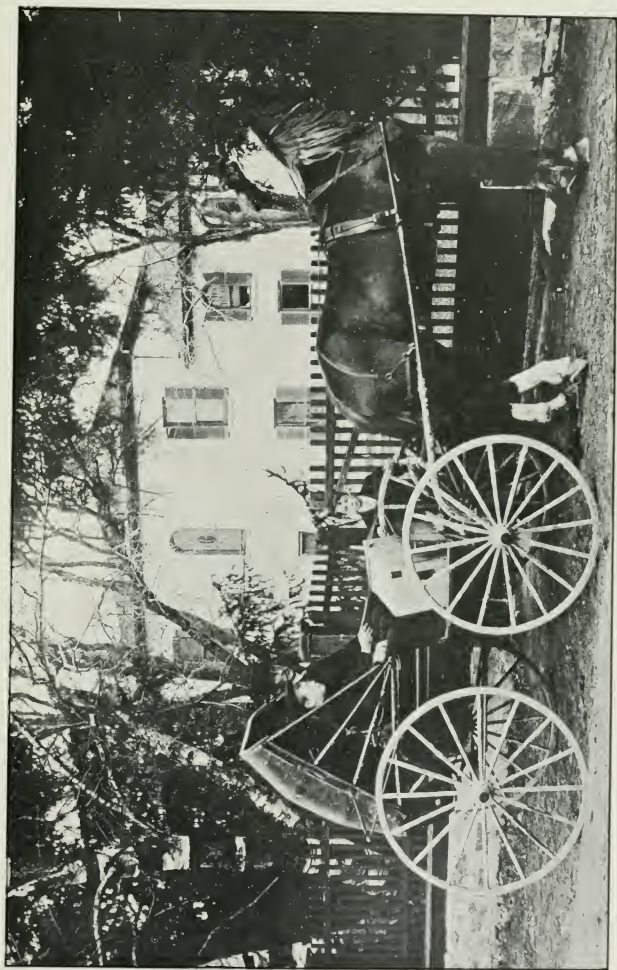
Chief Medical Officer.



THE COOMBE, HESPELER, ONTARIO, MISS SMYLY'S CANADIAN HOME FOR IRISH CHILDREN.



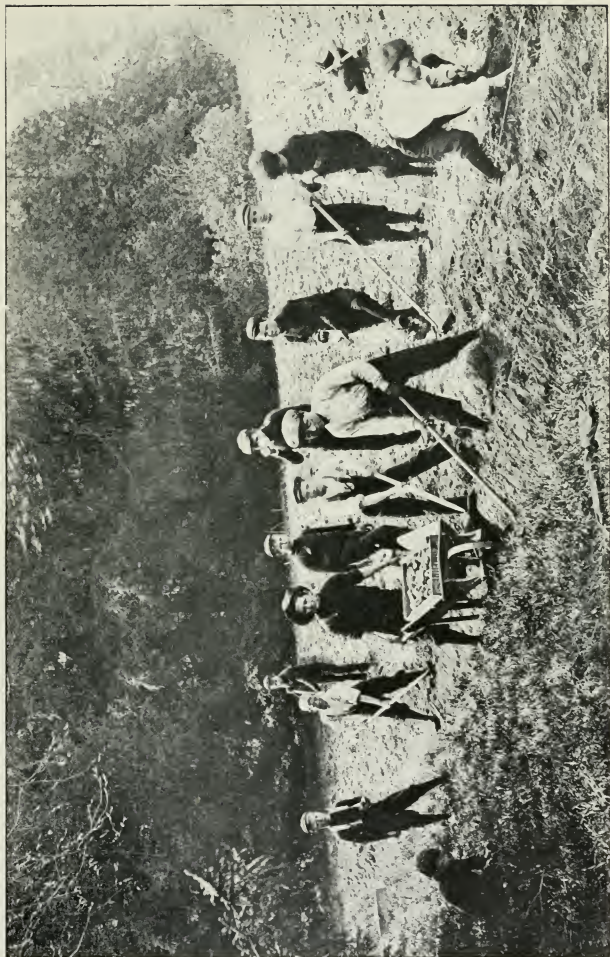
YOUNG BRITISHERS BUILDING A POULTRY HOUSE.



LEAVING FOR HIS NEW HOME.



A GROUP OF GIRLS RECENTLY ARRIVED IN CANADA FROM DR. BAUNALDO'S ENGLISH HOMES.



PLANTING POTATOES. IRISH LAIDS IN THEIR FIRST EXPERIENCE OF FARM LIFE.

PART III

SURVEYS

SURVEYS

REPORT OF THE SURVEYOR GENERAL.

DEPARTMENT OF THE INTERIOR,
TOPOGRAPHICAL SURVEYS BRANCH,
OTTAWA, September 16, 1907.

The Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the following report on the operations of the Topographical Surveys Branch for last year.

Heretofore the annual report has been for the fiscal year which ended June 30. Owing to the fact that June 30 came in the middle of the surveying season and the consequent difficulty of estimating the surveys made to that date, it has been the practice to make the statement and estimates of surveys in the field for the calendar year. Now that the end of the fiscal year has been changed to March 31, the fiscal year and the surveying season correspond fairly well, and it will be possible in future to have all statements for the fiscal year. In order, however, to bring this report to date, it is being made to cover the surveys for fifteen months, from January 1, 1906, to March 31, 1907.

SURVEYS FOR THE FIFTEEN MONTHS ENDING MARCH 31, 1907.

During this period, one hundred and forty-nine whole townships and eleven fractional townships were completely subdivided, while one hundred and forty-two townships were partially subdivided. Also, twenty-nine whole townships and one fractional township were completely re-surveyed while one hundred and twenty-three townships were partially re-surveyed. Sixty-four survey parties were employed, fifty-five being engaged on township surveys and nine on other surveys. Of the parties organized, thirty-five were paid by the day and twenty-nine were working under contract. Four of the parties under daily pay were located in Manitoba, eight in Saskatchewan, eight in Alberta, five in British Columbia, one in the Northwest Territories, and nine were part of the time in one province and part in another. Six contractors were located in Manitoba, seven in Saskatchewan, thirteen in Alberta, one in British Columbia and two part of the time in one province and part in another.

The contract surveys were inspected by Messrs. Geo. McMillan, P. R. A. Belanger, G. J. Lonergan, L. E. Fontaine, G. A. Grover and E. W. Hubbell, but with the exception of Mr. McMillan, their time was not entirely occupied with this work. The number of contracts examined was twenty-four.

TOWNSHIP SURVEYS.

The reports of the surveyors in charge of parties are given as appendices 13 to 45 inclusive; a perusal of these reports shows many instances of hard work and devotion to duty.

An illustration of what surveyors may have to contend with is afforded by the experience of Mr. J. N. Wallace, who established the fourteenth base line from the third to the second meridian, and the latter meridian northerly to the Saskatchewan river. The need of this survey was imperative; it was expected to prove a difficult undertaking, but the necessity of completing it had been impressed upon Mr. Wallace. Starting from Prince Albert in the latter part of May, difficulties at the beginning were only those usually met with in a bush survey, but after crossing the Saskatchewan, some of the endless muskegs of that northern country were encountered, and

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then the troubles of the party commenced. Mr. Wallace tried to find a way around, but there was none round these muskegs, and he had to go right through. After floundering nearly three months, in the fall of the year, through these half frozen swamps, he found himself, towards the end of December, at the foot of the Pasquia mountains, a rough stretch of country rising 1,400 feet above Carrot river. Five of his horses were dead, the remainder were rapidly failing, and he was far from supplies. 'We had been,' he says, 'through some hard work in the muskegs, but the experience of getting the line over these hills, or rather mountains, put all else in the shade. Not only had we the deep snow and the rough country, but being on the northerly slope of the mountains, we were exposed to the bitter winds coming in over the vast open areas to the north, and were deprived by the slope of the small amount of warmth in the sun, as it seldom rose, so far as the valleys are concerned, until ten o'clock, and set about half-past one or two.' The survey was finally completed on March 12; its success was due not only to pluck and energy displayed by Mr. Wallace, but also to his excellent arrangements for feeding his pack train and provisioning his party. Incidentally he discusses transportation by dogs and by pack horses, and he indicates the considerations which must guide a surveyor in adopting one or the other mode of transportation.

Another notable example of devotion to duty is furnished by Mr. A. W. Johnson, who is in charge of the surveys in the western half of the British Columbia railway belt. For the last three years, a considerable part of his time has been spent in marking upon the ground the limit of the belt. This line was laid down on the maps at a fixed distance of twenty-four miles from the railway, and as may well be imagined, it goes over some of the wildest parts of the mountains. The survey of such a line requires steady nerves and continuous hard work. Such luxuries as tents are not to be thought of, and the bill of fare must be reduced to bare necessities. The men take with them only what they can carry on their backs, and the heaviest load is for the surveyor. 'I cannot,' Mr. Johnson says, 'spend months grading trails up one mountain as they do on the international boundary south of Chilliwack, to save themselves the trouble of packing on their backs. People often say to me: 'Why do you pack on your back?' I have found that unless I do so, and lead when difficult, dangerous, or dirty work is to be done, the men will not do it either, or if they do, only in a slipshod, half-hearted way.'

Many other instances might be cited showing that the services of surveyors, as a class, deserve hearty appreciation.

The parties were distributed from the eastern boundary of Manitoba to the Pacific coast.

Mr. C. F. Aylsworth, D.L.S., who was making surveys and re-surveys in eastern Manitoba, speaks of the industrial possibilities of Beausejour. He reports that the peculiar quality of the sand in that district is especially adapted for the manufacture of glass. A company of Germans has been formed and a factory has been erected in a place convenient to the sand, which is found in unlimited quantities. Cement blocks and steam-dried white bricks are also manufactured there, and all three industries promise well.

Mr. Wm. Christie, D.L.S., was employed on re-survey work in eastern Manitoba, and Mr. W. J. Deans, D.L.S., on similar work as well as on some new surveys in the provinces of Manitoba and Saskatchewan.

Mr. Geo. A. Grover, D.L.S., was at work in Manitoba on re-surveys and the inspection of surveys made under contract. For some years Teulon has been the end of the Stonewall branch of the Canadian Pacific Railway, but this year the company is extending the line farther north, intending, Mr. Grover believes, to run eventually to Icelandic river on lake Winnipeg. This should prove a profitable line, for though the country is at present largely broken by marshes and swamps, these should gradually diminish with deforestation, and the soil in nearly all parts is excellent. This locality would seem to be well adapted for mixed farming and dairying, and the proximity of

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the great and rapidly growing market of Winnipeg would assure the settler good prices for his produce. The Canadian Northern Railway company also intends to extend its line along the shores of lake Manitoba from Oak Point. This also should prove a valuable extension, but there is a wide stretch between lakes Manitoba and Winnipeg that neither road seems desirous of entering, though the reason is not apparent, for it is a fertile country and fairly well settled, particularly when its distance from the railway and the difficulty of road travel are considered. Moreover, this should be a cheap country to build a railway through, there being no great engineering difficulties to overcome.

Oak Point is situated in a park-like piece of country, with oak clumps and prairie alternating, which faces on lake Manitoba. It has great natural beauty and Mr. Grover believes it is soon to be made into a summer resort. This neighbourhood has been settled for some time and the farmers all seem to be doing well. Cream is shipped to Winnipeg in large quantities, which will doubtless increase when better facilities for handling are provided.

Mr. David Beatty, D.L.S., made some correction surveys north of Prince Albert and east of Battleford.

Mr. E. W. Hubbell, D.L.S., was employed on re-survey work and inspection of surveys made under contract. Speaking generally of that portion of the province of Saskatchewan extending from Prince Albert in the north to Willow Bunch in the south, and from Milford in the east to Swift Current in the west, it may be said that of the thirty thousand square miles, twenty-five thousand are excellent agricultural land. It is being rapidly settled by a superior class of immigrants, many of whom may be designated as Canadian-Americans, men born in Canada, who emigrated to the United States, lived there many years, married, became possessed of property, and who now being persuaded that they can better their condition, have sold out and have taken up homesteads in the Canadian west. Mr. Hubbell estimates that, in the above mentioned district, for every square mile now under cultivation there are two hundred square miles of virgin soil.

Mr. W. R. Reilly, D.L.S., was employed on re-survey work in the province of Saskatchewan.

Mr. A. H. Hawkins, D.L.S., was engaged on surveys and re-surveys in the southern part of Saskatchewan and Alberta. On the way to make an examination of the third correction line he passed through Stirling and Lethbridge. Stirling is the centre of a new Mormon settlement and seems to be in a thriving condition. A large beet-root sugar factory at Raymond, some six miles west of Stirling, has created a very profitable industry. Irrigation schemes are being pushed in all directions, and the excellent produce of all kinds testifies to the fertility of the soil when properly watered. As one nears Lethbridge, several large irrigation canals are passed and the country assumes a still more settled aspect. Good buildings, larger stacks of grain and more fences mark the advance of civilization.

Similar surveys were made in central and southern Alberta by Mr. W. F. O'Hara, D.L.S.

Mr. A. W. Ponton, D.L.S., was employed during the early part of 1906 on block outline surveys in northern Alberta. Part of his work was in the vicinity of Lac la Biche. The country in this neighbourhood is generally wooded, poplar being found on the high land, and spruce in the swamps. The spruce timber available is sufficient to supply all lumber required for early settlement, but is too scattered for commercial purposes. A portable saw-mill would best meet local requirements. The soil is generally a good clay loam, becoming lighter and more of a sandy loam as the lake shore is approached. Lac la Biche has all the requisites for a summer resort, plenty of fish and game and beautiful scenery.

Mr. H. W. Selby, D.L.S., was in the vicinity of Lesser Slave lake, northern Alberta. The country is well suited for agriculture, but until there is nearer railway

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communication there will be no great influx of settlers, as there is no outlet for their produce.

Mr. Arthur Saint Cyr, D.L.S., ran some block lines in the Peace River district. In the vicinity of Prairie River settlement the quality of the soil is all that can be desired, and this section bids fair to become one of the most prosperous in the country. At Smoky river there has been much damage done by fires.

The settlers at Peace River Crossing and at Bricks settlement are at a great disadvantage on account of the scarcity of roads to their hay meadows. Coal is found in many places and the climate is better than that of the country to the south.

Mr. R. W. Cautley, D.L.S., who was surveying block outlines in Alberta, speaks of the great activity of the Edmonton district in railway construction, building, farming and lumbering. This has caused an unlimited and consequently an unsatisfied demand for labour and horses which has raised the wages of one, and the price of the other. In the vicinity of the important and growing town of Athabaska Landing there are several scattered settlements, but there yet remains much land that is suitable for occupation, and there is no doubt that a larger number of settlers will come into this country during the next year or two, particularly as it is served by the best wagon road out of Edmonton and Fort Saskatchewan, namely, the Athabaska Landing trail.

In Southern Alberta Mr. A. L. MacLennan, D.L.S., was employed in making subdivision surveys and Mr. C. F. Miles, D.L.S., on survey and re-survey work. In the greater portion of the district traversed, that is, in the wooded country, there is an abundance of game. This wooded portion is the chief hunting grounds for the Stony Indians, who kill deer in great numbers. Unless some restrictions are imposed to stop this indiscriminate slaughter, deer in this district will soon be exterminated. Nearly all the streams are well stocked with fish, the principal varieties being mountain, speckled and bull trout and grayling. There are also plenty of mountain grouse and partridge, and in certain localities a few prairie chicken.

Mr. C. C. Fairchild, D.L.S., was also working in southern Alberta.

Mr. L. E. Fontaine, D.L.S., was employed in southern and central Alberta in making surveys and re-surveys and in inspecting contracts. During the season he travelled over that part of Alberta lying between townships 37 and 52 between the fourth and fifth meridians. Great changes, he notes, have taken place in that district since 1898. Then a farm house or a ranch would be found every thirty or forty miles, but now the traveller is never out of sight of one or the other, and instead of vast wildernesses, beautiful fields of waving grain are now to be seen in every direction.

Mr. L. T. Bray, D.L.S., was engaged in subdivision and re-survey work in southern Alberta.

Mr. G. J. Lonergan, D.L.S., was employed in central Alberta in re-survey work and in the inspection of surveys made under contract. Following the Victoria trail northeast from Fort Saskatchewan, the country passed through is all well settled. Mixed farming is successfully carried on, considerable attention being devoted to hog raising. There is a splendid opening here for a large pork packing establishment. At present there is a small plant, but it is hopelessly inadequate. Contrary to the general idea, Stony plain is not a rough, rocky place. It is level, the soil is a rich sandy loam and it is known to grow the best No. 1 hard wheat in the Edmonton district. This plain was formerly part of the reservation for the Stony Indians, and hence its name. At St. Paul de Metis there is a Roman Catholic mission which was started eight years ago by the Rev. Father Therien. They have changed a scrub country into a profitable farm and beautiful garden, and have built a large church, a school and a convent. The mission has a steam thresher, a saw-mill, a shingle mill, a flour mill and a crusher, besides a full supply of farming machinery.

Mr. Jos. E. Ross, D.L.S., during the past season was making surveys in the railway belt, Kamloops district, British Columbia. Near Ashcroft the soil is of such an absorbent nature that irrigation has a tendency to cause slides. At Spatsum the land

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is stony, hilly and broken, and fit only for grazing. Gypsum deposits occur here, and some development has been made. The valley of Incomappleux river is bounded by mountains on each side. This valley is fit for settlement, with plenty of timber on the higher grounds. Valuable minerals have been found high up in the mountains, but cannot be worked at a profit, owing to the high cost of transportation.

Mr. A. W. Johnson, D.L.S., was in the western portion of the railway belt in British Columbia. During the season he made a re-survey of the townsite of Hope. All that is needed to make this place a resort for tourists, is a railway, because a pleasanter spot for a summer holiday could scarcely be found. There is splendid trout fishing close to the village, mountain climbing and big game shooting for those who care to take the risk of climbing after goats, or the trouble of forcing their way through the thick brush to the high open slides which are the feeding grounds of bears. Another place that would make an ideal summer resort is Chilliwak lake. It would be easy to build a good wagon road up to the lake and then it could be reached in a day from the town of Chilliwak. The fishing is good, the scenery magnificent and there is nearly always a good sailing breeze.

MISCELLANEOUS SURVEYS.

Mr. J. F. Richard, D.L.S., surveyed settlements at Cumberland House, The Pas and Big Eddy on Saskatchewan river. Cumberland House, including the Indian reserve, has about 600 inhabitants, two-thirds at least of which are of Indian origin. The language generally spoken is Cree, although several of the half-breeds understand English, and a few of them understand French. A considerable trade in furs is carried on.

Big Eddy settlement is situated to the north of the Saskatchewan river on the rear line of The Pas Indian reserve. There is no cultivable land unless extensive draining operations are carried out, the country being a plain covered with moss from twelve to twenty-four inches deep. The population, including the Indians, numbers about 500; they profess the Anglican religion. A branch of the Canadian Northern railway running towards Hudson bay will probably reach The Pas during the course of the summer.

Mr. J. B. Saint Cyr, D.L.S., made a survey of the settlements in the neighbourhood of Fort Vermilion, on Peace river. Large tracts are well adapted for farming and ranching; grain paid very well during recent years, the Hudson's Bay company paying as much as one dollar and fifty cents a bushel for wheat. Extensive beds of limestone have been found, as well as large deposits of salt near Salt river. There is a seam of good soft coal at a place called 'The Cliff,' fifteen miles north of Peace River Landing; it is about three to five feet thick. Fish and game are found in abundance.

While making various miscellaneous surveys and supervising some of the arrangements for transport, &c., Mr. P. R. A. Belanger, D.L.S., in the course of the season travelled several hundred miles across the different provinces, and found everywhere an activity greater than at any time in the past. In the Edmonton district the country is filling up fast, although there is still a large quantity of desirable land ready for settlement. This district is an ideal country for farmers from Ontario and Quebec who cannot be content to settle in open country where wood is not found for miles around.

On his way from Kamsack to the Touchwood hills and Prince Albert, he passed through three Doukhobor villages, Veregin, Buchanan and a village situated about two miles west of Buchanan. The houses are in rows a few feet distant from one another, are built with great symmetry and have a very neat, clean appearance. The Doukhobors, he says, are a very moral, quiet and industrious people, and, notwithstanding their occasional foolish pilgrimages, are undoubtedly desirable settlers. They

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have already cultivated a large proportion of their land, and their crops rank among the best in the locality.

At a short distance north of Touchwood Hills post office, there is a small settlement named Wishart established several years ago on the western edge of Round plain. This is a very rich country, the farmers are all well off and they carry on mixed farming with great success. Mr. Belanger saw there some of the best wheat that was grown in the west last summer. The adjoining land, the Round plain, is, however, mostly vacant, although the land is much the same. This is because speculators have acquired it with scrip and are holding it at a high price.

Mr. R. C. Laurie, D.L.S., made a re-survey of the townsite of South Battleford.

Mr. J. A. Macdonell was engaged in an exploration survey for the purpose of selecting three and a half million acres, a grant to the Dominion government in that portion of the Peace River district of British Columbia lying east of the Rocky mountains and adjoining the province of Alberta.

Mr. J. A. Kirk, D.L.S., made some miscellaneous surveys along Blueberry creek, in the railway belt in British Columbia. The valley of Blueberry creek is of no apparent value except for its timber. The soil is not favourable for timber of large size, hence the large cedar is usually hollow, and large healthy trees of any kind are rare. Still the valley produces fair timber, which with proper protection will prove a valuable asset.

Mr. P. A. Carson, D.L.S., continued the triangulation of the railway belt in British Columbia, the main object of this work being to furnish points of reference for the extension of subdivision surveys at a distance from the railway.

Mr. Arthur O. Wheeler, topographer, extended his photo-topographical survey of the Yoho Park in the Rocky mountains. Altogether forty-seven ascents were made and eighty-nine camera stations occupied, from which four hundred and seventy-one plates were exposed. The districts round Mts. Douglas and Drummond furnish a paradise for botanists and those fond of camping amidst beautiful scenery. The locality may be said to be one of the most attractive of the Rocky mountains.

Irrigation surveys were continued under the direction of Mr. John Stewart, D.L.S., Commissioner of Irrigation, Calgary, Alberta.

EXPLORATION SURVEYS.

Four parties under Messrs. J. W. McLaggan, P. G. Stewart, A. D. Moodie and W. Thibaudeau, were detailed to explore the country along the route of the proposed branch of the Canadian Northern Railway between Erwood and Fort Churchill, on Hudson bay. This line is to pass through The Pas, the part between Erwood and The Pas being now under construction.

Mr. J. W. McLaggan examined the country between The Pas, Paint lake and Burntwood river.

Messrs. P. G. Stewart and A. D. Moodie explored between Erwood and The Pas, Mr. Stewart being allotted the western portion and Mr. Moodie the eastern portion of this tract of country, while Mr. W. Thibaudeau examined the country lying between Fort Churchill and The Pas.

The object of these surveys was to get a detailed description of the country as to its general character, the nature of the soil, its fitness for agriculture, the value, quantity and location of the timber, the mineral resources and the climate.

Mr. J. W. McLaggan reported on the district between The Pas, Paint lake and Burntwood river. This is a sportsman's paradise. During the trip, he saw ten moose, six bears, one deer, one timber wolf, over a dozen lynx, a number of mink and other fur-bearing animals and ducks and geese innumerable. There are spots of good farming land and there should be no difficulty in raising good crops of all the hardy grains and vegetables, but the difficulty would be to make roads from one place to another, as the country between the spots of good land is rough and rocky.

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The whole country from Grass river to Burntwood river, with the exception of small areas along the lakes and rivers, has been swept by fire. There is a growth of young timber coming up since the fire, which may be of value in time. As a mineral country there is a wide field for prospectors; Mr. McLaggan saw indications of gold, silver, iron and limestone. The preliminary survey of the railway to Hudson bay has already been made from The Pas to the southeast of Reed lake; he thinks that from there the railway should cross Grass river between Reed and Wekusko lakes, and continuing down the north side of Grass river and Setting lake, pass to the north of Paint lake. This route would take the railway through the part of the country where there would be the most traffic.

Mr. P. G. Stewart explored the region northwest of Etoimami and of the Hudson Bay branch of the Canadian Northern Railway to The Pas. All through, the country is well covered with timber of all kinds, but poplar and spruce are most plentiful. He estimates the amount of standing timber available in this tract at about 600,000,000 feet B.M. The country is much the same as that explored by Mr. J. W. McLaggan.

Mr. A. D. Moodie's exploration was along the right of way of the Canadian Northern Railway, between Erwood and The Pas. The part first examined was that section lying between Leaf lake on the east, and the Canadian Northern railway right of way on the west. The larger part of this section consists of mossy muskegs sparsely dotted with spruce and tamarack scrub, and of gravel ridges, with spruce and small poplar; it is consequently unfit for agriculture. The poplar is mostly small, and is good only for pulpwood. Spruce suitable for lumbering is scattered. Moose, caribou, bears and smaller fur-bearing animals are abundant.

The general character of the country from the north end of Leaf lake to The Pas and as far as thirty miles east of the grade, which is already constructed to the latter point, is very similar to that of the section just described, except that the timber is of better quality and is more plentiful.

The country lying to the east and north of Little Pasquia river is composed entirely of muskeg with spruce and tamarack scrub. Its character can be judged from the fact that for days together the party was compelled to wade in water to the knees.

The population of The Pas is about five hundred, including Indians. Most of the inhabitants belong to the Church of England, which has a mission under the charge of Mr. Edwards. The village consists of a few half-breed houses, two stores and the mission.

The branch of the Canadian Northern railway to Hudson bay runs through a muskeg country nearly the whole way from Etoimami to The Pas, a distance of eighty-nine miles. The engineers discovered that the muskeg of this particular section rested on a solid foundation of limestone gravel at a depth of three to six feet below the surface, and they claim that once the muskeg is drained a good road-bed will be obtained.

Mr. W. Thibaudeau, C.E., explored the country lying between Fort Churchill, on Hudson bay, and The Pas, on Saskatchewan river.

Churchill harbour has an entrance 2,000 feet wide and vessels drawing thirty-six feet of water may approach to within 200 yards of the west shore, while vessels drawing twenty-four feet may approach to within 150 yards of the east shore. No great difficulty will be experienced in keeping the harbour clear of ice all the year round. Churchill harbour lies between two peninsulas. On the west peninsula, sandstone, limestone and white quartzite are found. On the east peninsula there are splendid building sites and plenty of good limestone for building purposes.

Fort Prince of Wales, at the west of the entrance to the harbour, was built in 1733. The walls are thirty-four feet thick and sixteen feet high. It was originally mounted with forty cannon.

The present Fort Churchill is situated on the western shore about five miles from the mouth of Churchill river. This is the headquarters of the Hudson's Bay Co.

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Timber for fuel is plentiful along the river. Salmon trout and whitefish are to be had at all seasons. Potatoes and vegetables are successfully grown, and good hay is to be had in abundance on both sides of the river. Game of all kinds is plentiful.

Between Churchill and North river the ridges are overgrown with small spruce and tamarack, but for the most part the country is level; it is covered with moss and small ponds and is constantly frozen up.

The same description applies to the land between Churchill and Owl rivers.

About one-third of the country from Churchill to The Pas is marsh. The higher lands are covered with spruce and tamarack, suitable only for fuel and pulpwood. No minerals of any kind are to be seen. Water-power is available from Deer, North, Churchill, Nelson, Burntwood and Grass rivers. Whitefish abound in all the lakes, and some trout, pike and sucker are occasionally to be had. Moose and caribou may be seen in fair numbers and also some rabbits, spruce grouse and ptarmigan. The total distance covered by Mr. Thibaudeau on his exploration was 690 miles.

The following is a comparison of the mileage surveyed since 1904:—

	Fifteen months Jan. 1, 1906 to Mar. 31, 1907.	1905.	1904.
	Miles.	Miles.	Miles.
Township outlines.....	1,306	1,591	1,285
Section lines.....	8,962	10,544	24,488
Traverse.....	1,848	1,809	4,441
Re-survey.....	4,948	2,579	7,699
Total for season.....	17,064	16,523	37,913
Number of parties.....	56	46	80
Average miles per party.....	305	359	474

The following table shows the mileage surveyed by the parties under daily pay and by the parties under contract:—

Work of Parties Under Daily Pay.	Fifteen months, Jan. 1, 1906, to Mar. 31, 1907.	1905.	1904.
	Miles.	Miles.	Miles.
Township outlines.....	756	1,008	719
Section lines.....	1,035	939	235
Traverse.....	643	421	223
Re-survey.....	4,815	2,499	2,122
Total for the season.....	7,249	4,867	3,299
Number of parties.....	29	26	22
Average miles per party.....	250	187	150

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Work of Parties Under Contract.	Fifteen months, Jan. 1, 1906, to Mar. 31, 1907.	1905.	1904.
	Miles.	Miles.	Miles.
Township outlines.....	550	583	566
Section lines.....	7,927	9,605	24,253
Traverse.....	1,205	1,388	4,218
Re-survey.....	133	80	2,809
Total for the season.....	9,815	11,656	31,846
Number of parties.....	27	20	57
Average miles per party.....	364	583	559

NOTE.—Owing to the nature of their work, the parties under Messrs. P. A. Carson, R. C. Laurie, J. A. Macdonell, J. W. McLaggan, A. D. Moodie, P. G. Stewart, W. Thibaudeau, and A. O. Wheeler, are not included in the statement of mileage for the fifteen months from January 1, 1906, to March 31, 1907.

DESCRIPTION OF TOWNSHIPS.

Descriptions of the townships subdivided have been compiled from the surveyors' reports received during the nine months ending March 31, 1907; they are given as appendix No. 46. The townships are put in order of township, range and meridian, and the descriptions are preceded by a list of all townships described.

Until the year 1893 such descriptions were published from time to time in separate volumes, but these volumes are now out of print and, moreover, are out of date, the last fifteen or twenty years not being included. As many applications are made for such information, the need of revised editions of these descriptions is becoming urgent, and it is hoped that they may be prepared at an early date.

SURVEY OF BLOCK OUTLINES IN THE PEACE RIVER DISTRICT.

The Peace River district having attracted considerable attention during recent years, a short account, such as may properly come within the scope of this report, of the initial surveys within the district may be opportune. A brief description of the method adopted in locating an initial point, with a passing notice of the difficulties encountered in a new field and a statement of the accuracy of the work performed as proven by later surveys, is all that will be attempted. For a description of the country, its resources, its climate, the fertility of its soil and the beauty of its scenery, other sources of information must be consulted.

The position of the sixth initial meridian in longitude 118° affects directly the location of the 120th meridian of longitude, which in the vicinity of Peace river forms the boundary line between the provinces of Alberta and British Columbia. It is, therefore, important that the position occupied by the sixth initial meridian, as surveyed on the ground, be established beyond reasonable doubt. Recent base line surveys in that district show that the posts on this meridian are about sixteen chains too far south, and the whole line about five chains too near to the fifth meridian.

This difference arose in the traverse survey by which an initial point on the sixth meridian was first established, but was not discovered until the spring of 1905, when the survey of the nineteenth base line between the fifth and sixth meridians was completed, affording the first check on the position of the sixth meridian.

The inception of the regular surveys in the Peace River district goes back to 1882, when it was decided to establish some block outlines. For this purpose a portion of the sixth initial meridian had first to be located. The nearest Dominion land

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survey line, at that time, was the fifth meridian, which, during the season of 1882 had been produced north across Athabaska river to the north boundary of township 71. The position of the sixth meridian was established by a cross country traverse from a point on the fifth meridian near its intersection with Athabaska river.

Mr. Wm. T. Thompson, D.T.S., who was entrusted with this survey, left Edmonton with his party on September 22, 1882, travelling by pack trail towards Lesser Slave Lake settlement, until the Pembina river was reached. At this point two scows were constructed of spruce lumber made by whip-sawing the large timber found in the river valley. The outfit and supplies were conveyed in these scows down the Pembina and Athabaska rivers to the mouth of Lesser Slave river, and up this to the foot of the lake. Here a number of sets of observations for latitude by transits over the prime vertical were taken by Mr. Thompson while waiting for ice to form before proceeding with the survey.

Early in December the geodetic traverse was commenced from the foot of Lesser Slave lake and continued easterly through the most favourable country. The general course of the river was followed for a distance of thirty miles to the junction of Lesser Slave and Athabaska rivers, where a point was established to be connected later with the fifth meridian by Mr. W. Ogilvie, D.L.S., when his survey of that line should cross Athabaska river. This point was indicated by a blazed tree marked 'Station O.' The traverse line was then run westerly across the lake and continued through the most open country by way of Stinking lake to Smoky river, where further observations for latitude were made. Care was taken to keep the line as nearly as possible in an east and west direction and the alignment was checked by frequent observations for azimuth.

From the foot of Lesser Slave lake to this point all transportation was necessarily by means of dog trains furnished by the natives, who had a considerable settlement at the head of the lake. Spring overtook the party at the crossing of Smoky river, and the method of transporting supplies which had been of such service during the winter months had to be abandoned. The dog trains were sent back to the lake and pack horses procured for bringing in supplies and moving the outfit.

In the meantime Mr. Ogilvie had established a connection between the fifth meridian and the point previously marked at the mouth of Lesser Slave river by Mr. Thompson. This point was found to be 186.03 chains west and 55.05 chains north of the northeast corner of section 13 in township 71, range 1, west of the fifth meridian. On receipt of this information Mr. Thompson continued his traverse line westerly the required distance to reach the sixth meridian. The differences of latitude and longitude between the initial and terminal points of the traverse line were carefully computed by means of geodetic formulæ and the latitude checked by further observations of transits over the prime vertical. The mean of four nights' observations made the latitude of the terminal point nearly seven seconds less than the latitude computed from the data furnished by the traverse line. Owing to the proximity of Birch hills to the north and the valley of Smoky river to the south, the location was not considered favourable for the determination of the latitude, which might be affected by abnormal deviations of the plumb line. As cloudy weather prevented observations later at more favourable points on the production of the meridian northerly, only a slight correction was made to the computed latitude before permanently planting the posts on the meridian. Practically the meridian was established from the traverse alone, no use being made of the latitude observations.

It is to be regretted that Mr. Thompson was not favoured with better weather so that a number of observations could have been taken at points suited for the accurate determination of the latitude. A difference of 16 chains in the position of the posting on the meridian represents a difference of 10 seconds in latitude. With good weather and a favourable location it is practically certain that the surveyor, by exercising his usual precautions, would have very materially reduced this discrepancy. Even then, had he trusted his latitude observations, the error would have been re-

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duced to a little over five chains. The position in longitude of the meridian line checks fairly close with the measurements made on the different base lines which have since been completed between the fifth and sixth meridians. According to the twentieth base line, which for some distance passes through the same locality as the traverse line, the position of the sixth meridian differs from its theoretic location by only 1·69 chains. Such agreement reflects credit on the chain-bearers engaged on the traverse.

The linear measurements were made by means of a steel band tape; the observations for azimuth and latitude and the production of the line were effected with a six-inch transit theodolite. When it is remembered that the length of the steel band tape is affected directly by the temperature and varies from other causes, that the surface irregularities and unequal elevation of the country, as well as the personal errors of the chain-bearers are factors which affect the accuracy of the surveyor's measurements, but the value of which cannot be satisfactorily determined, the result, in respect to longitude, is very creditable.

During the progress of the survey Mr. Thompson's assistant made a micrometer survey of Lesser Slave river and lake, ascertaining also the leading features of the adjacent country.

The fifth and sixth meridians are now connected by five consecutive base lines, which taken together, furnish the best available evidence as to the position which the sixth initial meridian occupies with respect to the 118th meridian of longitude with which it theoretically should coincide. The sixteenth base line was run by R. W. Cautley, D.L.S., in the summer of 1904, and winter of 1905; the seventeenth was surveyed in three sections by A. Saint Cyr, D.L.S., in 1904, A. Driscoll, D.L.S., in 1905, and A. Saint Cyr, D.L.S., in 1906, respectively; the eighteenth was also surveyed in three sections by A. Saint Cyr, D.L.S., in 1904, J. N. Wallace, D.L.S., in 1905, and A. Saint Cyr, D.L.S., in 1906, respectively; the survey of the nineteenth was commenced by E. Bray, D.L.S., in 1904, and completed by A. Saint Cyr, D.L.S., in 1905, while the twentieth was run by H. W. Selby, D.L.S., in 1905, with the exception of the most westerly eleven miles, which had been previously surveyed by C. C. Fairchild, D.L.S.

The closings of the different base lines show the sixth meridian as located on the ground, to be somewhat east of its theoretic position, and the posting thereon to be too far south. The following table summarizes the evidence furnished by these lines:—

Base line.	Mer. too far east.	Posting too far south.
16 th.	8·78 chs.	15·24 chs.
17 "	4·85 "	17·00 "
18 "	7·14 "	15·77 "
19 "	3·02 "	18·44 "
20 "	1·69 "	16·41 "

A number of base lines have also been run west from the sixth meridian, two of which have been established as far as the boundary between Alberta and British Columbia. Various other outline surveys, as well, have been projected within the district, so that the way is now fairly prepared for the prosecution of subdivision work in any locality where such surveys may appear desirable.

It is the intention to move all the posts to correct latitude when the subdivision surveys are proceeded with.

A diagram showing the closings on the base lines between the fifth and sixth meridians accompanies this report.

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THE WESTERN BOUNDARY OF THE CANADIAN PACIFIC RAILWAY BELT IN BRITISH COLUMBIA.

The Settlement Act of 1883 described the Canadian Pacific Railway belt as follows:—

‘The public lands along the line of the railway before mentioned wherever it may be finally located to a width of twenty miles on each side of said line as provided in the order in council, section 11, admitting the province of British Columbia into confederation.’

In the Dominion order in council, approved on May 27, 1887, the western boundary of the belt is described as follows:—

‘Commencing at the intersection of the international boundary with the waters of Semiahmoo bay, a branch of Boundary bay, an arm of the Pacific ocean; thence westerly and northerly following the shore of said Semiahmoo bay and also of Mud bay, another branch of said Boundary bay, to the easterly limit of a road known as Mud Bay road; thence northerly following the said limit of said road to the southern bank of the Fraser river; thence northerly to the point where the easterly limit of the north road touches the north bank of the Fraser river; thence northerly following the said limit of said north road to the southerly shore of Burrard inlet; thence north-westerly to Pt. Roche, being a point where the westerly shore of the north arm of Burrard inlet joins the northerly shore of the main arm of Burrard inlet; thence northerly following the westerly shore of the said north arm of Burrard inlet to the most northerly part of the same; thence due north to the north boundary of township 7, range 7, west of the 7th initial meridian according to the Dominion Lands system of surveys adopted in the survey of the railway belt in British Columbia.’

By the order in council approved on March 29, 1895, an agreement was to be concluded with the government of the province of British Columbia. Clause 1 of said order reads as follows: ‘The province shall accept as the boundary of the railway belt the limits laid down and marked out by the Dominion order in council approved on May 27, 1887, and by the map attached thereto (a copy of which is hereto annexed), or the nearest township line to the boundary of the belt which would be found by actual admeasurement, as may be found by the Minister of the Interior most convenient.’

In the order in council of the British Columbia government, dated December 6, 1895, clause 1 reads as follows:—

‘The province shall accept as the boundary of the railway belt the limits laid down and marked out by the Dominion order in council, approved on May 27, 1887, and by the map attached thereto (a copy of which is annexed to the said report of the Privy Council approved by His Excellency on March 29, 1895), or the nearest section line to the boundary of the belt which would be found by actual measurement as may be found by the Minister of the Interior most convenient.’

In a letter dated June 23, 1896, the Deputy Commissioner of Lands and Works, Victoria, B.C., was notified by the Deputy Minister of the Interior that it had been decided to adopt for the boundary the nearest section line to the boundary of the belt which would be found by actual measurement, and diagrams showing the section line in question were inclosed.

Attention was drawn to the fact that the boundary shown upon the diagrams stops at the creek flowing from the north into the head of the north arm of Burrard inlet, leaving the western boundary of the belt undefined, therefore, it appeared that another notification to the provincial government under the provisions of the provincial order in council of December 6, 1895, would be necessary to fix the western boundary of the belt.

In a letter dated April 9, 1903, the Deputy Commissioner of Lands and Works, British Columbia, was asked if the province would agree to accept for the western boundary the line described in the order of His Excellency the Governor General in Council, of May 27, 1887, to which a reply was received as follows:—

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'In reply I beg to say that the boundaries referred to in that order, with the exception of that part which follows the westerly shore of the north arm of Burrard inlet, have always been understood by this government as agreed to between the province and the Dominion; but instead of the westerly shore of the north arm of Burrard inlet we have always considered the eastern shore of the north arm to be the boundary line, and we have sold and otherwise alienated islands lying in the said north arm. I, therefore, beg to suggest that the description in the order in council above referred to may be altered so as to make the easterly shore of the north arm the boundary between the provincial and Dominion lands.'

By the order in council of July 8, 1904, the eastern shore of the north arm of Burrard inlet was accepted as part of the western boundary of the railway belt, subject to the ratification of parliament and of the legislature of British Columbia, the said boundary to be as follows:—

'Commencing at the intersection of the international boundary with the waters of Semiahmoo bay, a branch of Boundary bay, an arm of the Pacific ocean; thence westerly and northerly following the shore of said Semiahmoo bay and also of Mud bay, another branch of said Boundary bay, to the eastern limit of a road known as Mud Bay road; thence northerly following the said limit of said road to the southern bank of the Fraser river; thence northerly to the point where the eastern limit of the north road touches the north bank of the Fraser river; thence northerly following the said limit of said north road to the southern shore of the main arm of Burrard inlet; thence due north to the northern shore of the said main arm; thence westerly following upon the said northern shore of the main arm to the eastern shore of the north arm of Burrard inlet; thence northerly following upon the eastern shore of the said north arm to the most northerly point of the peninsula between Bedwell bay and the said north arm; thence northeasterly on a straight line to the point where the northern boundary of township thirty-nine, west of the coast meridian intersects the eastern shore of the north arm of Burrard inlet; thence northerly following upon the said eastern shore to the mouth of Mesliloet river, a stream flowing from the north into the head of the said north arm; thence northerly along the middle of the main channel of the said Mesliloet river to the point of its intersection with the north boundary of township seven, in range seven, west of the seventh meridian, according to the Dominion Lands system adopted in the survey of the railway belt in British Columbia.'

In a report of a committee of the executive council of the government of British Columbia, approved by the Lieutenant Governor on August 13, 1904, it is stated that 'The committee observe that the recommendation of the Minister of the Interior that, subject to the ratification of parliament and of the legislature of British Columbia, the eastern shore of the north arm of Burrard inlet be accepted as part of the western boundary of the railway belt, is approved.

'The committee advise that the Dominion government be informed that the provincial government approves and accepts the recommendation of the minister.'

The Secretary of State called the attention of the Lieutenant Governor of British Columbia to the fact that the provincial minute, approved on August 13, 1904, merely accepted the eastern shore of the north arm of Burrard inlet as part of the western boundary of the railway belt, not the whole western boundary as described by metes and bounds in the minute of the Privy Council approved by the Governor General on July 8, 1904.

The report of a committee of the executive council, approved by the Lieutenant Governor on March 3, 1905, was, therefore, substituted for that of August 13, 1904. This accepts the eastern shore of the north arm of Burrard inlet as part of the western boundary of the railway belt and approves and confirms the said boundary as further defined in the order in council of July 8, 1904.

In a report of the committee of the Privy Council, approved by the Governor General on July 15, 1905, it was recommended that, as the government of the Domin-

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ion and of the province of British Columbia had agreed to accept a certain line for the western boundary of the Canadian Pacific Railway belt, the Minister of Justice be asked to have prepared for submission to parliament at its next session a Bill containing the necessary provisions for an Act to ratify the boundary in question in so far as the Dominion of Canada is concerned, and it was further recommended that the Lieutenant Governor of British Columbia be asked to have the necessary action taken by his government to ratify such boundary in so far as the province of British Columbia is concerned, by an Act of the legislature of that province.

In a report of a committee of the executive council, approved by the Lieutenant Governor on August 10, 1905, it was recommended that the Attorney General be requested to prepare a Bill to be laid before the legislature at its next session to ratify the boundary in question so far as the province is concerned. Accordingly a Bill was introduced, but when it came up for discussion it was pointed out that the Mud Bay road mentioned in the order of the Governor General in Council of July 15, 1905, does not extend to Mud bay, and at its northern end joins what is known as the Yale road, which leads to the Fraser river at Brownsville, opposite New Westminster, and that instead of extending to the north bank of the Fraser river, the north road, mentioned in said order, ends at the northeasterly limit of the city of New Westminster. To meet this difficulty it was considered necessary to make some amendments in the description of the boundary contained in the said order of the Governor General in Council, and the Dominion government having signified its consent to the changes, the Bill received the sanction of the Lieutenant Governor of British Columbia on March 12, 1906.

The description of the western boundary of the railway belt as ratified by the Provincial Act is as follows:—

‘Commencing at the intersection of the international boundary with the waters of Semiahmoo bay, a branch of Boundary bay, an arm of the Pacific ocean; thence westerly and northerly, following the shore of the said Semiahmoo bay, and of Mud bay, another branch of the said Boundary bay, to a point on the shore of Mud bay at the intersection of the west boundary line of township two, New Westminster district, with the waters of said Mud bay; thence north along the said west boundary of township two, to the northwest corner of said township two; thence northerly along the eastern side lines of the Mud Bay (or Scott) road, and the Yale road, to the south bank of the Fraser river at Brownsville; thence northerly, crossing the Fraser river to a point on the north bank of the said river where the eastern side line of the north road produced south would intersect the north bank of the Fraser river; thence north to the eastern side line of said north road; thence north along the said eastern side line of said north road to its intersection with the south shore of Burrard inlet; thence north to the north shore line of Burrard inlet; thence westerly and northerly following the shore line of Burrard inlet to the most northerly point of the peninsula between Bedwell bay and the north arm of Burrard inlet; thence northeasterly on a straight line to the point where the northern boundary of township thirty-nine west of the coast meridian intersects the eastern shore of the north arm of Burrard inlet; thence northerly, following upon the said eastern shore to the mouth of the Meslihoet river, a stream flowing from the north into the head of said north arm; thence northerly along the middle of the main channel of the said Meslihoet river to the point of its intersection with the northern boundary of township seven, in range seven, west of the seventh meridian, according to the Dominion Lands system adopted in the surveys of the railway belt in British Columbia.’

A Bill to ratify the agreement between the government of the Dominion of Canada and the government of the province of British Columbia respecting the western boundary of the railway belt received the sanction of the Governor General on March 22, 1907.

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ASTRONOMICAL FIELD TABLES.

The astronomical field tables, as described in the report of 1906, are still being issued. These tables were formerly set up in type and printed in the ordinary way, but it was difficult to obtain them from the printers in time for issue to the surveyors. Inasmuch, however, as a great deal of the matter contained in the tables is the same from year to year, forms containing all those parts which never vary have been made, so that when a new set of tables is required, only those parts which vary have to be added to the forms. The forms themselves, as well as the variable data to be added, are stamped by means of type, and the titles, footnotes, &c., are printed by a small handpress and pasted on the form in the proper place. The finished table is then reduced and printed by photo-zincography, thus avoiding all delays in printing.

The diagram of the altitude and azimuth of the pole star, as described in the report of 1906, is issued periodically with the field tables.

A star map is now being constructed for the convenience of observers for latitude. It will facilitate the selection of pairs of stars for Talcott's method.

IMPROVEMENT OF SURVEYS.

The improvement in execution of fieldwork, mentioned in previous reports, is well illustrated by a remark made by one of our surveyors who was engaged in re-tracing old surveys and afterwards in making an inspection of some recent subdivisions. He writes: 'To change from retracing old lines run twenty years ago to inspecting present day contract work is, I fear, not in the interest of rigid inspections. There has been such an improvement, not in any particular, but in every detail of the surveys made in this country in the past twenty years that one would hesitate to speak of them as being the same class of work. In no way could the advantage of the numerous modifications in the Manual and in the field instruments used be more markedly illustrated than by this change which I was forced to make this season. The lines examined in contracts of 1906 were straight, the chainage good and the corners well marked, none of which could be said, as a rule, of the more ancient surveys in this country.'

CORRESPONDENCE.

The correspondence consisted of:

Letters received.	7,300
Letters sent.	8,209

The staff consists of the secretary, one clerk, two stenographers and typewriters and two messengers.

ACCOUNTS.

The accountant's record shows:

Number of accounts dealt with.	493
Amount of accounts.	\$515,040
Number of cheques forwarded.	1,896

The staff consists of an accountant and an assistant accountant.

OFFICE STAFF.

A list of the office staff of the Topographical Surveys Branch at Ottawa is given in appendix No. 11.

A number of changes have taken place during the nine months ending March 31, 1907. In the Metcalfe Street office Mr. Percy Wilkinson has been appointed assistant accountant, and J. O'Leary messenger in place of F. T. Ellis, who was transferred to

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another branch. Mr. Geo. H. Watt, chief of the first division, has resigned to take a survey contract. Messrs. H. G. Barber, A. J. Elder, W. T. Green, F. W. Rice, E. E. D. Wilson and W. E. Weld have been absent all or part of the time, acting temporarily as assistants to surveyors. Mr. P. A. Carson, who is in charge of the trigonometrical survey, spent the summer in British Columbia. Miss G. B. Campbell and Messrs. H. A. Mackenzie, C. C. Smith, Wm. Crawford and H. L. Chilver of this office, and Messrs. M. W. Sharon and S. B. Roach, of the geographer's office, have resigned. Mr. L. J. Gleeson has been detailed to another branch and Mr. F. H. Mackie has been transferred to the office of the chief astronomer. Mr. H. J. Higgerty has been transferred from the lithographic office to the Timber and Mines Branch.

The additions to the staff during the past nine months are: A. Brown, E. L. Burkholder, J. C. Ball, E. E. Brice, C. Fitzgerald, J. B. Hutton, R. V. Heatcott, M. Kimpe, J. F. Moran, J. A. Macdonald, F. L. Marriott, J. W. Rochon, H. J. Smith, R. O. Spreckley, A. Tremblay, J. N. Goodall, who was re-appointed, and P. F. X. Genest, who was transferred from the Yukon office. Mr. E. Villeneuve was changed from the lithographic office to the office of the chief draughtsman. Those appointed to the lithographic office are: S. Boyle, J. Gagnon and S. H. Shore; the latter was recently transferred to the office of the chief draughtsman. Messrs. W. Anderson, W. Blue, J. Beveridge and F. B. Inkster were appointed to the geographer's staff; Mr. E. G. Ouimet to the photographer's staff, and Mr. N. Landry to the survey records office as messenger.

OFFICE OF THE CHIEF DRAUGHTSMAN.

A summary of the work executed in the chief draughtsman's office is given as appendix No. 6.

This part of the branch is divided into five divisions.

First Division—Instructions and General Information.

In this division instructions are prepared for all surveys to be performed in the field. When the surveyor has been selected, instructions are prepared for him giving any directions that may be necessary in connection with the survey. In the case of parties under day pay, the surveyor is also instructed as to the size of party, the place of organization, the nature of the transport outfit and the rate of pay to employees. Outline sketches are furnished to him showing the monuments, bearings and distances of the lines of Dominion land surveys already established in the vicinity of his work. He is also supplied with maps or plans of all Hudson's Bay Company reserves and Indian reserves in the neighbourhood. Field books, astronomical field tables, stationery, forms for accounts, statutory declarations, &c., are also furnished. During the nine months ending March 31, 1907, instructions were issued for eighty-six survey parties, involving the preparation of 798 sketches, and 328 maps and tracings.

In this division all returns of survey from the surveyors are received. They are dated, stamped, and posted in the various registers under the name of the surveyor. They are then sent to the second division for examination. The receipts during the nine months were 630 progress sketches, 390 books of field notes, 169 plans, 56 timber reports and 382 statutory declarations. After examination and the compilation of the plans, the books of field notes are returned to this division and forwarded to the survey records office. During the nine months 643 field books and the returns of 67 miscellaneous surveys were placed on record. Entries are also made in the registers for all township and other plans printed. Plans of 520 townships, 4 townsites, 49 miscellaneous surveys and 52 sectional sheets were printed during the nine months.

When the progress sketches sent in by the surveyor have been examined and found satisfactory, preliminary plans for the townships are issued, four copies for each township. One copy is placed on file in this office and one each furnished to the

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survey records office, the Land Patents Branch and the land agent. The object of these plans is to allow of the land being opened for entry at once, without waiting for the final examination of the surveyor's returns and the issue of the official plan. Preliminary plans of 179 townships were issued during the nine months.

At the close of each month a list of the surveys approved during the month is forwarded to the secretary of the department. Every six months another list of the whole townships, fractional townships and partially surveyed townships, the surveys of which have been approved, is sent to the secretary. Under the provisions of sub-clause 7 of clause 22 of the Dominion Lands Act, the governor of the Hudson's Bay Company is to be notified of the surveys approved, and the list is for the purpose of giving the notice called for by the Act.

Numerous communications on miscellaneous matters pertaining to surveys are dealt with in this division. To reply intelligently to many of these questions requires days of search for information among various sources, frequently in different branches of the department. During the nine months 743 such communications were dealt with, involving the preparation of 258 sketches, maps, &c.

Second Division—Examination of Surveyors' Returns.

A detailed description of the system of examining and dealing with surveyors' returns was given in the annual report for the year ending June 30, 1906. The same system is still in force, with some few improvements in the minor details.

The room formerly occupied by the geographer and his staff on the second floor of the Metcalfe Street office, having been vacated, the partition between it and the room occupied by the compiling and examining staff, and also an unused elevator shaft were removed, thus affording increased accommodation and better working facilities. Temporary quarters were procured in the Orme building on Wellington street, while this work was in progress, and the disadvantage of part of the staff being removed from registers, plans of former surveys and other sources of information, retarded the work to some extent. In addition to the removal of the partition, a ventilating system was installed, this being easily accomplished by utilizing part of the space formerly occupied by the elevator shaft. The value of this provision for ventilation is inestimable, as a plentiful supply of good fresh air is now available, whereas before, no provision whatever was made for ventilation.

The work has been materially increased by the passage of an Act respecting roads and road allowances in the provinces of Saskatchewan and Alberta (section 6 of chapter 100 of the Revised Statutes of Canada), which provides that where a survey is made of a road diversion, a duplicate copy of the plan of such survey, approved by the chief engineer of the Department of Public Works of such province, shall be forthwith transmitted by the said Department of Public Works to the Surveyor General, who, within one month from the receipt of it by him, may require the plan of such survey to be withdrawn from the land titles office by the Department of Public Works of such province.

Before patents issue for Dominion lands required by railway companies for the right of way of their lines, the plans of such railways must be examined and approved by the Surveyor General. A large number of these plans have accumulated and their examination involves considerable work. Although some progress has been made in re-issuing township plans out of print, the number of plans of which reprints are required has increased rather than diminished during the past nine months. The demand for township plans has become so great, that the stock of those issued years ago, of which only a small edition was printed, soon became exhausted. Larger editions are now printed, so that unless on account of additional surveys, plans recently issued are not likely to require re-issue for many years to come.

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The work of this division during the past nine months is as follows:—

Plans compiled..	409
Subdivision returns examined..	312
Outline returns examined..	122
Miscellaneous survey returns examined..	210
New editions of township plans..	72
Progress sketches examined—contractors..	205
Progress sketches examined—day men..	270
Memoranda sent to surveyors..	329
Memoranda received from surveyors..	342

Third Division—Drawing for Reproduction.

The third division of the draughting staff is engaged chiefly in making finished copies of township and other plans for reproduction by photo-zincography or lithography. During the nine months 527 plans of townships were prepared for printing. For part of this period, while the offices were being renovated, the staff was divided, a number of the draughtsmen remaining at the office on Metcalfe street, while the others were accommodated in temporary quarters on Wellington street. This separation of the staff impeded the progress of the work.

Seventy-nine drawings and plans of a miscellaneous nature were undertaken. Some of the most important of these were the astronomical field tables for the use of surveyors. The present method of preparing these and also the new star map, is described under a separate heading.

A map in colours, showing the route of the proposed Hudson Bay branch of the Canadian Northern Railway, was compiled and printed. This map shows the routes of explorers who recently visited the district, the main features of the country through which the railway will run, and the saving in rail transportation from the western provinces.

The original plans for photo-zincographing are carefully filed away; when new editions of any of them are required, it is only necessary to add the information obtained from later surveys and to photograph them again.

An improvement has been made in the attachment used in the stamp, for holding the type, while stamping a plan. The old holder (see fig. 1) consisted of a solid frame,

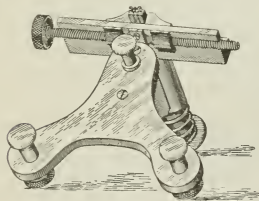


Fig 2

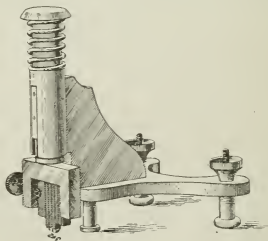


Fig 1.

cut out in the front to receive the type, with a horizontal thumb screw passing through one side, by means of which the type was held securely in place. This necessitated the use of quads or other small pieces of metal, in order to fill up the extra space in the holder, after the type had been placed at the centre. Considerable time

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was required to adjust each setting of type and quads; also the action of the end of the thumb screw against the soft metal of the quad soon wore it away and created a tendency for the screw to work out of line, enlarging the threaded hole in the holder.

The new holder (see fig. 2) consists of a one-piece frame, having the front shaped out to receive two movable jaws. These jaws have each a projection on the back which slides in a slot in the back of the holder. Through these projections and in the rear of the holder, passes a thumb screw having a bearing at its centre, half in the back of the holder and half in a small cap attached to the back of the holder by screws. This bearing being smaller than the body of the threaded parts of the screw and being situated in the centre of the holder, keeps the screw from moving laterally. One-half of the screw is threaded with a right-hand thread, the other half with a left-hand thread, the holes in the movable jaws being also threaded right-hand and left-hand. The result of this arrangement is that when the thumb screw is turned in one direction the jaws open away from the centre of the holder; when it is turned in the opposite direction the jaws move towards the centre and are capable of coming together at that point. They can hold the thinnest object securely, and whatever is held between them is always in a central position in the holder, and the use of quads for this purpose is done away with.

For the colouring of maps and plans, an air brush has been procured. The air brush is especially useful for colouring photographic enlargements of maps, as the paper used in photographing is often of such a character that it is impossible to put on an even tint in the ordinary way.

Fourth Division—British Columbia Surveys.

Most of the surveys in British Columbia were made by the regular surveyors, Messrs. J. E. Ross and A. W. Johnson. Both worked in winter, as well as in summer, in order to take advantage of weather conditions favourable to surveying operations in the various localities.

In addition to the work of the regular surveyors, a few returns have been received of surveys made for private individuals and of other small surveys.

The British Columbia section of the staff which, for three years, occupied quarters on Sparks street separated from the main office, was this year transferred to the space in the Surveyor General's office formerly occupied by the geographer's staff. This facilitates the work of the staff, the returns and information required for reference being more readily accessible.

The British Columbia surveyors remained so long in the field that their returns were somewhat delayed, and those received entailed more work than usual. As most of the traverse surveys in British Columbia were made for the purpose of establishing section corners and land boundaries, this portion of the work, which will this year contain well over one thousand courses, has to be carefully checked by latitudes and departures.

Forty-five township plans have been compiled, and three hundred and four miscellaneous plans and tracings have been made.

Fifth Division—Mapping.

The work of this division is the compilation and drawing of any maps that may be required. The staff has been engaged principally on the 'sectional sheets,' adding new surveys and other information and preparing them for new editions. Much new compilation has been added to the sectional sheets covering the railway belt in British Columbia so as to show the topography, not only within the railway belt, but also outside of it to the full size of the sheet. The sheets which extend over the west boundary of Alberta into British Columbia are also being added to, in the same way.

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The compilation of the surveys of mineral claims in the Yukon Territory, showing their position on the general map on a scale of 40 chs. to an inch, has been kept up, but the number of lots so recorded has been very small compared with previous years.

SURVEY RECORDS' OFFICE.

A large portion of the survey records staff has been employed copying plans which have been out of print, and which were required by agents, land guides and companies in placing settlers on their lands.

Homestead maps, on a scale of one mile to an inch, showing the homesteads open for entry in the western provinces, have been completed and forwarded to the different sub-agents.

The amount of correspondence necessary to supply the largely increased demand for township plans was, on an average, between twenty-five and thirty letters per day.

The plans and files in connection with reservations of right of way for roads and railways in the provinces of Manitoba, Saskatchewan and Alberta, have greatly increased the work of this office. All these plans and files are recorded here. Every railway right of way plan is on file and the reservations for the right of way in the lands affected are noted. The correspondence in this connection, averaging between fifteen and twenty letters per day, goes through this branch.

The Eclipse Manufacturing company completed the cases, and finished all the other changes necessitated by their removal to their new quarters in the Canadian building. The printed plans of the parishes, settlements and town plots, were removed to their new places and re-indexed; this new arrangement does much to economize the time required for finding them.

A complete index of all the plans west of the fifth meridian, showing the character of the survey and the name of the surveyor for all original plans, has been compiled and has proved a valuable aid to ready reference.

The increase of work during the year has been so large that it is only by using the greatest care in indexing and arrangement that the present staff is able to keep pace with it.

PHOTOGRAPHIC OFFICE.

In presenting the report of the photographic office, it is interesting to note that the total amount of work executed during the nine months exceeded that executed during the twelve months ending June 30, 1906.

There is a large increase in the number of township plans, over one hundred having been reproduced in the month of January alone.

The dry plate work and the bromide enlarging have also greatly increased.

Hitherto the Geological Survey parties have, to a large extent, employed sketching for their surveys, but now they are beginning to use photography, which they find quicker and more satisfactory. Last season only one of their parties used photography, while this season it is expected that four or five will be equipped with the necessary photographic outfits. From the negatives, bromide enlargements are made in this office. This greater use of photography is the cause of the large increase in the number of bromide enlargements.

Considerable time has been spent on special work. The photo-lithographing of a section of Nelson river showing the proposed Hudson Bay railway, is a fair example of the use that can be made of photography in map making. This map was enlarged from a thirty-five mile scale to a twenty-five mile scale. Another interesting piece of work was the enlargement of part of Alberta, Saskatchewan and the Northwest Territories, from a thirty-five mile scale to a twelve mile scale. This work, which occupied only one week, would take at least three months if done by draughting.

SESSIONAL PAPER No. 25

The staff consists of one photographer in charge, one general photographer with three assistants, and one photo-lithographer and photo-engraver with two assistants.

Besides the development, printing and enlargement of the views taken by surveyors in the field, they have to copy, reduce and enlarge to proper scale the plans and maps used in compilations, to photograph the plans and maps sent in for reproduction and to prepare zincplates or transfers of the same. The photographic work of the Geological Survey Department has also been done here. A schedule of the work executed is given as appendix No. 9.

LITHOGRAPHIC OFFICE.

There has been no change in the method of doing the work in this office.

The statement of the work executed, given as appendix No. 10 to this report, shows a decrease in the number of maps printed but a decided increase in the number of the township plans.

The number of the staff is the same as last year; it consists of one foreman, one transferer, one power press printer and one press feeder.

BOARD OF EXAMINERS FOR DOMINION LAND SURVEYORS.

The regular annual meeting of the board was held at Ottawa, beginning on the second Monday in February, 1907 (February 11), as directed by clause 101 of the Dominion Lands Act, and was continued until March 2. Special meetings were held on July 19, 1906, and March 21, 1907.

During the February meeting examinations were held simultaneously in Ottawa, Toronto, Winnipeg and Calgary. Professor L. B. Stewart, D.T.S., of the School of Practical Science, presided at the examination in Toronto; Mr. J. Lonsdale Doupe, D.L.S., in Winnipeg, and Mr. A. O. Wheeler, D.L.S., in Calgary.

It had also been arranged to hold a special examination at the same time in Vancouver, under Mr. E. B. Hermon, D.L.S., but the candidates did not present themselves.

Fifteen candidates passed the examination for admission as articled pupil, as follows:—

M. H. Baker, St. Thomas, Ont.
T. W. Brown, Alberton, Ont.
L. S. Cokely, Lethbridge, Alta.
A. S. Cram, Ottawa, Ont.
G. H. Ferguson, Toronto, Ont.
L. F. Heuperman, Edmonton, Alta.
W. G. McElhanney, Ottawa, Ont.
E. W. Murray, Seaforth, Ont.
J. L. Rannie, Toronto, Ont.
A. Roger, Ottawa, Ont.
A. H. D. Ross, Ottawa, Ont.
Alan Stewart, Ottawa, Ont.
A. G. Stuart, Montreal, P.Q.
A. H. Swinburn, Ottawa, Ont.
E. O. Wheeler, Calgary, Alta.

Fourteen candidates passed the final examination for admission as surveyor, as follows:—

N. A. Burwash, Toronto, Ont.
C. A. Chilver, Walkerville, Ont.
P. C. Coates, Toronto, Ont.

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S. R. Crerar, Toronto, Ont.
 C. H. Fullerton, New Liskeard, Ont.
 P. Gillespie, Toronto, Ont.
 W. T. Green, Ottawa, Ont.
 G. B. McColl, Winnipeg, Man.
 D. H. Nelles, Ottawa, Ont.
 D. T. Townsend, Toronto, Ont.
 J. E. Umbach, Ottawa, Ont.
 W. H. Waddell, Hamilton, Ont.
 J. Waldron, Pine Grove, Ont.
 E. W. Walker, Regina, Sask.

Oaths of office and of allegiance and bonds for the sum of one thousand dollars each, as required by clause 115 of the Dominion Lands Act, were received from eleven candidates who had previously passed the necessary examinations for commissions as Dominion land surveyors and had complied with the other requirements of the Act.

Ten commissions as Dominion land surveyors were issued, as follows:—

E. R. Bingham, Toronto, Ont.
 N. A. Burwash, Toronto, Ont.
 C. A. Chilver, Walkerville, Ont.
 S. R. Crerar, Toronto, Ont.
 W. T. Green, Ottawa, Ont.
 J. D. McLennan, Ottawa, Ont.
 G. B. McColl, Winnipeg, Man.
 D. H. Nelles, Ottawa, Ont.
 D. T. Townsend, Toronto, Ont.
 J. E. Umbach, Ottawa, Ont.

Every Dominion land surveyor is required by clause 125 of the Dominion Lands Act, to be in possession of a subsidiary standard measure furnished by the secretary of the board of examiners. Nine such standards were issued during the year.

A list of surveyors who have been furnished with standard measures up to March 31, 1907, will be found in appendix No. 3.

The correspondence of the board amounted to:

Letters, &c., received.	571
Letters sent.	435

The examination questions used at the examination in February, 1907, are submitted as appendix No. 12.

Synopsis of the Work of the Board.

The meeting of July 19, 1906, was a special meeting called to pass the necessary resolution admitting J. D. McLennan as a Dominion land surveyor, his commission having been withheld until the completion of his term of apprenticeship.

Previous to the annual meeting in February sets of question papers for the various examinations were prepared by the members of the board. At this meeting the answers of three candidates at the limited preliminary examination, seventeen at the full preliminary examination, nineteen at the final D.L.S. examination, and one at the D.T.S. examination were examined.

Some discussion took place on the regulation made at the meeting in May, 1906, whereby candidates obtaining 75 per cent or more on any subject are not required to write on such subject if they present themselves again. It was felt that from such candidates a higher percentage should be required than from those coming up for the first time. No action in the matter was taken at this meeting.

SESSIONAL PAPER No. 25

The question of who are eligible for examination under clause 111 of the Dominion Lands Act, having come up, it was decided that in future the secretary should accept articles for one year's service only from graduates of colleges and universities who hold proper diplomas.

Considerable time was taken up in discussing the regulations governing the examination for certificate as Dominion topographical surveyor; and the schedule of studies was re-arranged. It was agreed that before the next meeting a brief statement should be prepared setting forth the work to be covered in each subject of this examination, and a list of the books to be used in preparing for it. The work was divided among the members of the board, Dr. Deville taking three subjects, and Dr. Klutz and Dr. King four subjects each.

A resolution was passed fixing the percentage of marks required to pass any examination at 50 per cent in each subject, and allowing candidates who obtain the required 50 per cent in certain subjects, but fail in other subjects, to take supplementary examinations.

A special meeting of the board was held on March 21, at which the curriculum of studies for the D.T.S. examination was further considered and a list of text books prepared.

A resolution was also passed allowing candidates whose term of service at the time of examination is within three weeks of completion to write on such examination, provided that field work is complete at the time of writing. Commissions in such cases will be withheld until the completion of the full term of apprenticeship of one year or three years, as the case may be.

The following documents are appended:--

APPENDICES.

Schedules and Statements.

.....

No. 1. Schedule of surveyors employed and work executed by them from July 1, 1906, to March 31, 1907.

No. 2. Schedule showing for each surveyor employed from Jan. 1, 1906, to Mar. 31, 1907, the number of miles surveyed of township subdivision lines, township outlines, traverses of lakes and rivers, and resurvey.

No. 3. List of Dominion land surveyors who have been supplied with standard measures.

No. 4. List of lots in the Yukon Territory surveys of which have been confirmed from July 1, 1906, to March 31, 1907.

No. 5. List of miscellaneous surveys in the Yukon Territory returns of which have been received during the nine months ending March 31, 1907.

No. 6. Statement of work executed in the office of the chief draughtsman.

No. 7. List of sectional maps revised, printed, reprinted and revised and reprinted from July 1, 1906, to March 31, 1907.

No. 8. Statement of work executed in the survey records office for the nine months ending March 31, 1907.

No. 9. Statement of work executed in the photographic office during the nine months ending March 31, 1907.

No. 10. Statement of work executed in the lithographic office during the nine months ending March 31, 1907.

No. 11. Names and duties of employees of the Topographical Surveys Branch at Ottawa.

No. 12. Examination papers of the Board of Examiners for Dominion land surveyors.

Nos. 13 to 45. Reports of the surveyors employed.

No. 46. Descriptions of surveyed townships submitted by Dominion land surveyors during the nine months ending March 31, 1907.

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MAPS.

The following maps accompany this report:—

1. Diagram showing closings on base lines between the fifth and sixth meridians.
2. Mr. P. G. Stewart's exploration on the west side of the Canadian Northern railway from Etoimami to The Pas; to accompany his report.
3. Sketch map showing country near fourteenth base line, province of Saskatchewan, to accompany the report of J. N. Wallace, D.L.S.
4. Map to accompany J. W. McLaggan's report of exploration in Saskatchewan and the Northwest Territories.
5. Mr. A. D. Moodie's exploration from Etoimami to The Pas; to accompany his report.
6. Topographical survey of Canada—trigonometrical section. Triangulation in British Columbia. To accompany the report of P. A. Carson, D.L.S.

I have the honour to be, sir,

Your obedient servant,

E. DEVILLE,

Surveyor General.

SCHEDULES AND STATEMENTS.*

APPENDIX No. 1.

SCHEDULE of Surveyors employed and work executed by them from July 1, 1906 to March 31, 1907.

Surveyor.	Address.	Description of work.
Aylsworth, C. F....	Madoc, Ont....	Re-survey of township 10 range 7, township 14 range 8, parts of townships 14 and 16 range 7, and parts of townships 15 ranges 7 and 8, all east of the principal meridian.
Baker, J. C.....	Vermilion, Alta.	Contract No. 14 of 1906; subdivision of township 59 range 20, township 58 range 21, and townships 61 ranges 25, 26 and 27, all west of the fourth meridian.
Beatty, David	Parry Sound, Ont. ...	Correction survey in townships 51 ranges 27 and 28 west of the second meridian. Retracement surveys in the following townships west of the third meridian;—township 38 range 13, townships 45 ranges 9 and 10, townships 41, 42, 43 and 44 ranges 10 and 11, and townships 49 and 50 range 1. Retracement surveys in townships 50 ranges 26, 27 and 28 west of the second meridian.
Belanger, P. R. A....	Ottawa, Ont.....	Inspection of contracts No. 18 of 1905 and Nos. 11 and 12 of 1906. Restoration survey in the following townships west of the second meridian;—townships 24 ranges 1, 13, 14 and 15, townships 25 ranges 12, 14, 15 and 16, townships 26 ranges 12, 13 and 15, township 27 range 7, townships 28 ranges 6 and 13, townships 29 ranges 13, 14 and 15, township 30 range 13, townships 31 ranges 12 and 13 and townships 32 ranges 9, 10 and 11. Restoration survey in the following townships, west of the principal meridian;—township 5 range 34, townships 6 ranges 30, 32 and 34, townships 7 and 8 ranges 32 and 34, township 24 range 29, township 26 range 28 and townships 30 and 32 range 29.
Bolton, Lewis.....	Listowel, Ont.	Contract No. 3 of 1906; subdivision of townships 3 and 4 ranges 13 and 14, east of the principal meridian.
Bourgeault, A.	St. Jean Port Joli, Que.	Contract No. 11 of 1906; subdivision of townships 30 and 31 ranges 15 and 16, parts of township 30 range 14, and township 29 range 15, all west of the second meridian.
Bray, L. T.	Amherstburg, Ontario.	Re-survey in township 11 range 22, and subdivision in townships 1, 2, 3 and 4 range 30, west of the fourth meridian. Subdivision in townships 1 and 2 range 1, in township 5 range 2, in townships 6, 7, 8 and 9 range 3, in township 7 range 4, and in township 8 range 6, all west of the fifth meridian.
Carson, P. A.	Ottawa, Ont.....	Triangulation surveys in British Columbia, in connection with the Trigonometrical Section of the Topographical Survey of Canada.
Cautley, R. W.....	Edmonton, Alta.....	Survey of the seventeenth base line across ranges 17 to 27 inclusive, west of the fourth meridian.
Cautly, R. H.	Edmonton, Alta.	Contract No. 16 of 1906; sub-division in townships 57, 58, 59 and 60 range 5, west of the fifth meridian.
Christie, Wm.....	Chesley, Ont.....	Re-survey in township 17 range 1, in township 18 range 2, in townships 19 and 20 ranges 3, 4 and 5, and in township 20 range 6; re-survey of part of the outlines of township 16 range 1, of township 19 range 6, of township 18 range 3 and of township 17 range 2, all west of the principal meridian.

* Appendices Nos. 12 to 46 will appear in separate monograph form.

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APPENDIX No. 1.—Schedule of Surveyors employed and work executed by them from July 1, 1906, to March 31, 1907.—*Continued.*

Surveyor.	Address.	Description of work.
Deans, W. J.	Brandon, Man.	Subdivision in township 16 range 4, in townships 15, 16, 17 and 18 range 10, and in townships 14, 15, 16, 17 and 18 range 11, all west of the principal meridian. Re-survey of township 7 range 27, of townships 5, 6, 7 and 8 range 28 and of townships 5, 6, 7, 8 and 9 range 29, all west of the principal meridian. Re-survey of part of township 7 range 9, west of the second meridian. Miscellaneous surveys in township 17 range 21, west of the principal meridian.
Doupe, Jos.	Winnipeg, Man.	Re-survey in township 6, range 14 west of the second meridian.
Drummond, Thos.	Montreal, Que.	Contract No. 17 of 1906; subdivision of townships 57, 58, 59 and 60 range 6, west of the fifth meridian.
Dumais, P. T. C.	Hull, Que.	Contract No. 9 of 1906; subdivision of townships 26 ranges 12, 13 and 14, townships 25 and 26 range 10, and township 23 range 14, west of the principal meridian. Re-survey of townships 25 and 26 range 11, west of the principal meridian.
Edwards, Geo.	Ponoka, Alta.	Contract No. 13 of 1906; subdivision of townships 11 and 12 range 11; partial subdivision of townships 10 and 11 range 13, and townships 7, 8, 9, 10 and 11 range 1, west of the third meridian; survey of the east outline of townships 9 and 10 ranges 11 and 12 and of townships 5, 6, 7 and 8 range 2, west of the third meridian.
Fairchild, C. C.	Brantford, Ont.	Subdivision in townships 25, 26 and 27 range 11, in townships 25, 26, 27 and 28 range 12, and in township 24 range 8, all west of the fifth meridian. Miscellaneous work near Banff, Alta.
Fawcett, Thos.	Niagara Falls, Ont.	Contract No. 20 of 1906; subdivision of townships 56, 57, 58 and 59 range 4, west of the fifth meridian.
Fontaine, L. E.	Lévis, Que.	Re-survey of township 12 range 27, west of the third meridian. Miscellaneous surveys in townships 41 and 42 range 1, in township 43 range 3, in township 37 range 4, in township 47 range 5, in townships 43, 44 and 47 range 6, in township 40 range 8, in townships 41 and 42 range 9, in township 44 range 10, in township 38 range 14, and in townships 39 ranges 15 and 16, all west of the fourth meridian. Re-survey of township 50 range 3 west of the fifth meridian. Inspection of contracts Nos. 5 and 22 of 1906.
Grover, Geo. A.	Toronto, Ont.	Re-survey of township 18 range 1, east of the principal meridian. Re-survey of townships 19 and 20 ranges 1 and 2, and of townships 22 ranges 7 and 8, west of the principal meridian. Inspection of contracts Nos. 3, 4, 5, 6, 7, 8 and 10 of 1906.
Hawkins, A. H.	Listowel, Ont.	Subdivision of township 2 range 29 west of the third meridian. Re-surveys in townships 1 ranges 12 and 13, in township 2 range 13, in townships 6 and 7 range 17, in townships 10 and 11 range 22 and in township 13 range 29, all west of the fourth meridian. Re-survey of outlines of townships 1 and 2 range 8, of townships 1, 2, 3 and 4 range 9, of townships 1 ranges 10, 11 and 14, of township 2 range 14 and of township 10 range 24, all west of the fourth meridian. Survey of part of the south outline of township 3 range 29 west of the third meridian.
Holcroft, H. S.	Toronto, Ont.	Contract No. 10 of 1906; subdivision of township 7 range 9 and townships 6, 7, and 8 range 10, all east of the principal meridian. Subdivision of townships 7 and 8 ranges 27, 28, 29 and 30 west of the second meridian. Survey of the east outline of township 6 range 30, west of the second meridian.
Hopkins, M. W.	Edmonton, Alta.	Contract No. 23 of 1906; subdivision of townships 59 and 60 ranges 7, 8, 9 and 10, all west of the fourth meridian.
Hubbell, E. W.	Ottawa, Ont.	Re-survey in township 22 range 1, in townships 21 and 22 range 2, in townships 21, 22 and 23 range 3, in townships 21 and 22 range 4, in townships 21 and 22 range 5, in townships 21 ranges 6 and 7 and in townships 21 and 22 range 8, all west of the third meridian. Re-survey in township 27 range 24, in township 24 range 28, in townships 18 and 19 range 29, and in townships 26 and 29 range 25, all west of the second meridian. Inspection of contracts Nos. 13 and 25 of 1906.

SESSIONAL PAPER No. 25

APPENDIX No. 1.—Schedule of Surveyors employed and work executed by them from July 1, 1906, to March 31, 1907.—*Continued.*

Surveyor.	Address.	Description of Work.
Jephson, R. J.	Winnipeg, Man.	Miscellaneous surveys in townships 44 and 45 range 28 west of the principal meridian and in township 44 range 3 west of the second meridian.
Johnson, A. W.	Kamloops, B. C.	Subdivision in townships 1, 2, 3, 4 and 5 range 26, in township 1 range 27, in townships 2 and 3 range 24, in townships 2 and 4 range 25, in township 3 range 23, in township 3 ranges 28 and 29, in township 4 range 28 and in township 15 range 27, all west of the sixth meridian. Subdivision in township 19 east of the coast meridian. Traverses in township 2 range 25, in townships 3 ranges 23, 24, 25 and 26, in townships 4 ranges 24, 25 and 26, in townships 5 ranges 25 and 26, in township 15 range 27, and in township 3 range 28, all west of the sixth meridian. Traverses in townships 19 and 20 east of the coast meridian.
Kirk, J. A.	Revelstoke, B. C.	Double traverse of Blaeberry creek valley from the mouth to the northern limit of the railway belt, and part subdivision of township 28 range 22 west of the fifth meridian.
Knight, R. H.	Edmonton, Alta.	Contract No. 21 of 1906; subdivision of townships 50 and 51 ranges 5 and 6, and townships 54 and 55 range 7, all west of the fifth meridian.
Loneragan, G. J. ...	Buckingham, Que.	Re-surveys in townships 51 ranges 2 and 3 west of the fifth meridian and in townships 56 ranges 22 and 24 west of the fourth meridian. Correction surveys in townships 58 and 59 range 22 west of the fourth meridian. Miscellaneous surveys in township 59 range 23, in townships 59 ranges 17 and 18, in township 52 range 12, in township 60 range 14 and in township 55 range 4, all west of the fourth meridian; and in township 53 range 28 west of the third meridian. Subdivision in township 51 range 20 west of the fourth meridian. Correction survey at Fort Saskatchewan. Survey of outlines of township 56 range 25, of township 49 range 1, of township 57 range 14, all west of the fourth meridian. Survey of outlines of townships 53 and 54 ranges 27 and 28 west of the third meridian. Inspection of contract No. 23 of 1906.
Laurie, R. C.	Battleford, Sask. ...	Re-survey of the townsite of South Battleford.
Macdonell, J. A. ...	Winnipeg, Man.	Exploration survey of three and a half million acres, grant to the Dominion Government "in that portion of the Peace river district of British Columbia lying east of the Rocky mountains and adjoining the province of Alberta."
MacLennan, A. L. ...	Toronto, Ont.	Subdivision in townships 11 and 12 range 3, and in townships 10 and 11 range 4, and survey of the east outline of township 12 range 4, all west of the fifth meridian.
McFarlane, W. G. ...	Toronto, Ont.	Contract No. 5 of 1906; subdivision of townships 34 and 35 range 22, townships 28 and 32 range 23, townships 24 and 35 range 25, and township 35 range 26, all west of the principle meridian. Subdivision of townships 7 and 8 ranges 14, 15 and 16, townships 6 ranges 13, 14, 15 and 16, township 7 range 13, and townships 3 ranges 12 and 13, all west of the fourth meridian.
McFee, A.	Innisfail, Alta.	Contract No. 22 of 1906; subdivision of township 28 range 18, and townships 35 ranges 14, 15 and 16, all west of the fourth meridian. Traverse in township 35 range 2 west of the fifth meridian.
McGrandle, Hugh. ...	Wetaskiwin, Alta. ...	Contract No. 18 of 1906; subdivision of townships 58 and 59 range 7; surveys of outlines in townships 57, 59 and 60 range 7, and in township 58 range 8; traverse in township 60 range 7, all west of the fifth meridian.
McLaggan, J. W. ...	Strathcona, Alta.	Exploratory survey in the province of Saskatchewan and in Kewatin territory northeasterly from The Pas.
McMillan, Geo.	Ottawa, Ont.	Inspection of contracts Nos. 12, 15, 17, 19 and 20 of 1905 and contracts Nos. 1, 14, 15, 16 and 21 of 1906. Traverses in townships 59 and 60 range 11, west of the fourth meridian.
Michaud, A.	Edmonton, Alta. (Since deceased)	Contract No. 19 of 1906; subdivision of townships 54, 55 and 56 range 5, west of the fifth meridian.

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APPENDIX No. 1.—Schedule of Surveyors employed and work executed by them from July 1, 1906, to March 31, 1907.—*Continued.*

Surveyor.	Address.	Description of work.
Miles, C. F.	Toronto, Ont.	Subdivision in township 15 range 1, in townships 13, 14 and 15 range 2, in townships 17, 18, 19 and 20 range 3 and in townships 21 and 22 range 4, west of the fifth meridian. Survey of outlines of townships 12 ranges 3 and 4, west of the fifth meridian. Traverse in township 21 range 27, west of the fourth meridian.
Molloy, John.	Winnipeg, Man.	Contracts Nos. 2 and 7 of 1906; subdivision of townships 1 and 2 range 10, townships 1, 2 and 6 range 11, townships 2, 3 and 6 range 12, townships 1, 5 and 6 range 13, townships 5, 6 and 7 range 14 and township 6 range 9; traverse in townships 13 and 14 ranges 12 and 13, all east of the principal meridian.
Montgomery, R. H. .	Prince Albert, Sask. .	Contract No. 12 of 1906; subdivision of townships 50 ranges 22, 23, 24, 25 and 26 and townships 51 ranges 22, 23 and 26 and survey of the east outline of townships 52 ranges 22, 23 and 24, all west of the second meridian. Subdivision of townships 50 ranges 2 and 3, and townships 51 ranges 1 and 2, all west of the third meridian.
Moodie, A. D. . . .	Lakefield, Ont.	Exploration survey of the country between Erwood, Saskatchewan and The Pas, Keewatin along the right of way of the Canadian Northern railway.
O'Hara, W. F.	Ottawa, Ont.	Re-surveys in townships 32, 33 and 34 ranges 21 and 22, and in township 35 range 21 west of the fourth meridian. Miscellaneous surveys in township 38 range 28 west of the fourth meridian, and in township 38 range 1, west of the fifth meridian. Subdivision in township 5 range 3, west of the fifth meridian.
Parsons, J. L. R. . .	Winnipeg, Man. . . .	Contracts No. 6 of 1906 and No. 3 of 1907; subdivision of townships 9 ranges 10 and 11, township 10 range 9 and townships 15 and 16 ranges 14 and 15, all east of the principal meridian; subdivision of townships 23 and 24 ranges 4, 6 and 7; subdivision in township 29 range 10, and survey of part of the outlines of township 28 range 10, all west of the principal meridian.
Reilly, W. R.	Regina, Sask.	Re-surveys in townships 33 and 34 ranges 1 and 2, in townships 38 ranges 1, 2 and 3, in township 37 range 1 and in township 35 range 6, all west of the third meridian. Re-surveys in townships 41 and 42 range 28, west of the second meridian. Partial re-surveys in township 34 range 6, west of the third meridian and in townships 41 and 42 range 28 west of the second meridian.
Richard, J. F.	Ste. Anne de la Pocatière, Que.	Settlement surveys at The Pas Cumberland House and Big Eddy.
Rinfret, R.	Montreal, Que.	Contract No. 24 of 1906; subdivision of townships 65, 66, 67 and 68 range 13, townships 65, 66, 67 and 68 range 14, and townships 66 and 68 range 15; survey of the east outline of township 65 range 16, all west of the fourth meridian.
Ross, Jos. E.	Kamloops, B. C.	Subdivision surveys in townships 22 ranges 26 and 27, west of the fifth meridian; also in townships 23 ranges 2 and 3, in townships 22 and 23 range 16, in townships 18 and 22 range 17, in townships 17 ranges 17, 18 and 19, in township 16 range 18, and in townships 19 ranges 16, 17 and 18, all west of the sixth meridian. Traverses in townships 19 ranges 16, 17 and 18, in townships 17 and 18 range 17, in township 17 range 18, in townships 22 and 23 range 2, and in townships 21 and 22 range 1, all west of the sixth meridian; also in township 21 range 29 west of the fifth meridian. Surveys on the shores of Shuswap and Mara lakes. Traverse of Columbia river from Beaver mouth to the north limit of the railway belt. Traverse of Incomapleux river and Boyd creek trail. Traverse of Huff lake and part of North Thompson river.
Roy, Geo. P.	Quebec, Que.	Contract No. 15 of 1906; subdivision of townships 58 and 59 range 27, west of the fourth meridian, and townships 60 ranges 3 and 4, west of the fifth meridian.

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APPENDIX No. 1.—Schedule of Surveyors employed and work executed by them from July 1, 1906 to March 31, 1907.—*Concluded.*

Surveyor.	Address.	Description of work.
Saint Cyr, A.	Ottawa, Ont.	Survey of the seventeenth base line across ranges 19 to 22 inclusive west of the fifth meridian, the eighteenth base line across ranges 1 to 8 inclusive west of the sixth meridian, the twenty-first base line across ranges 21 to 24 inclusive, the twenty-second base line across ranges 21 to 26 inclusive, and the eighteenth base line across ranges 20 to 22 inclusive, west of the fifth meridian.
Saint Cyr, J. B.	Ste. Anne de la Perade, Que.	Surveys of the Fort Vermilion, North Vermilion and Boyer settlements, in the Peace river district. Re-surveys in townships 6 ranges 25, 26 and 27 west of the principal meridian.
Saunders, B. J.	Edmonton, Alta.	Survey of the fourth base line across ranges 13, 14 and part of 15 and the fifth base line across ranges 13 to 17 inclusive, east of the principal meridian.
Selby, H. W.	Toronto, Ont.	Subdivision in township 76 range 15, in townships 74, 75 and 76 range 16 and in townships 73, 74 and 75 range 17, west of the fifth meridian. Survey of part of the outlines of townships 73 ranges 16 and 18 and of township 75 range 15 west of the fifth meridian. Traverse of the southerly boundaries of lots in Heart River and Big Prairie settlements, Alta.
Stewart, P. G.	Britannia Bay, Ont.	Exploration survey of the country between Erwood, Saskatchewan and The Pas, Keewatin along the Canadian Northern railway right of way.
Teasdale, C. M.	Concord, Ont.	Contract No. 25 of 1906; subdivision of townships 9, 10 and 11 ranges 28, 29 and 30 west of the second meridian. Partial subdivision of township 10 range 4, west of the third meridian.
Thibaudeau, W.	Ottawa, Ont.	Exploration survey of the country lying between Fort Churchill on Hudson bay and The Pas on Saskatchewan river.
Tyrell, J. W.	Hamilton, Ont.	Contracts Nos. 4 and 27 of 1906; subdivision of townships 7 ranges 11, 12 and 13, township 8 range 11, and townships 16 and 17 ranges 9 and 10, all east of the principal meridian. Survey of the east outline of townships 16 and 17 range 8 and of the north outline of township 15 range 9, all east of the principal meridian.
Wallace, J. N.	Calgary, Alta.	Survey of the fourteenth base line between the third and second meridians, and of the second meridian as far north as Saskatchewan river. Survey of lines to connect with "Red Earth" and "Shoal Lake" Indian reserves.
Warren, Jas.	Walkerton, Ont.	Re-surveys in townships 21 and 22 ranges 27 and 28, west of the third meridian. Retracement surveys in townships 11 and 12 ranges 25 and 26, in townships 14 ranges 19 and 30, in township 16 range 15 and in township 19 range 24, all west of the second meridian.
Watt, Geo. H.	Ottawa, Ont.	Contract No. 8 of 1906; subdivision of townships 14 and 15 range 10, and township 14 range 9; partial subdivision of township 15 range 9, all east of the principal meridian.
Wheeler, A. O.	Calgary, Alta.	Topographer of the Department of the Interior. Phototopographical surveys from Mts. Douglas and Drummond near Red Deer river, to the Beaverfoot range.

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APPENDIX No. 2.

SCHEDULE showing for each surveyor employed from January 1, 1906, to March 31, 1907, the number of miles surveyed, of township section lines, township outlines, traverses of lakes and rivers and re-survey; also the cost of same.

Surveyor.	Miles of Section Lines.	Miles of Outlines.	Miles of Traverse.	Miles of Re-survey.	Total Mileage.	Total Cost.	Cost per Mile.	By Day Work or by Contract.
						\$ cts.	\$ cts.	
Aylsworth, C. F.				236	239	7,143 00	29 88	Day.
Baker, J. C.	234	18	56		308	8,270 27	26 85	Contract.
Beatty, David.				484	484	6,700 00	13 84	Day.
(b) Belanger, P. R. A.				48	48	5,847 72		"
Bolton, Lewis.	199		26		225	6,334 00	28 15	Contract.
Bourgeault, A.	198	11	36	30	275	7,132 00	25 94	"
Bray, L. T.	87	12		70	169	6,052 61	35 81	Day.
Cautley, R. W.		120			120	7,528 91	62 74	"
Cautley, R. H.	192	25	58		275	7,284 00	26 49	Contract.
Christie, Wm.			142	339	481	6,825 81	14 19	Day.
Deans, W. J.	201	32	20	551	904	7,023 88	7 77	"
Doupe, Jos.	4				4			"
Drummond, T.	194	24	67		285	7,586 60	26 62	Contract.
Driscoll, A.	33	24	14		71	2,243 85	31 60	"
Dumais, P. T. C.	66	6			72	2,533 00	35 18	"
Edwards, Geo.	535	49			584	4,434 00	7 59	"
Fairchild, C. C.	68	12	27	3	110	5,905 48	53 69	Day.
Fawcett, T.	185	12	61		258	6,956 00	26 96	Contract.
(b) Fontaine, L. E.			10	73	83	8,189 09		Day.
(b) Grover, Geo. A.			7	179	186	7,019 61		"
Hawkins, A. H.		18	3	305	326	5,903 66	18 11	"
Holcroft, H. S.	575	42			617	10,506 00	17 03	Contract.
Hopkins, M. W.	383	12	152		547	11,875 56	21 71	"
(b) Hubbard, E. W.				703	703	9,048 26		Day.
Jephson, R. J.	16		13		29	579 00	19 97	Contract.
Johnson, A. W.	61		60	17	138	12,242 97	88 72	Day.
Kirk, J. A.	3		49		52	629 00	12 10	Contract.
Knight, R. H.	165	2	62		229	6,462 00	28 22	"
(b) Lonergan, G. J.	27	2	13	219	261	8,409 13		Day.
MacLennan, A. L.	14	6	11		31	2,816 00	90 84	"
MacLennan, A. L.	29	5	20		54	1,296 00	24 00	Contract.
McFarlane, W. G.	837	6			843	10,839 00	12 86	"
McFee, A.	153	1	61		215	1,806 00	8 40	"
McGrandle, H.	79	36	6		121	3,325 00	27 48	"
(a) McMillan, Geo.			4		4	7,037 06		Day.
Michaud, A.	235	8	43		286	8,184 00	28 62	Contract.
Miles, C. F.	212	19	1		232	8,020 57	34 58	Day.
Molloy, John.	838	60	51	12	961	27,957 00	29 09	Contract.
Montgomery, R. H.	507	60	23	1	591	17,297 00	29 27	"
O'Hara, W. F.	12			217	229	7,631 88	33 33	Day.
Parsons, J. L. R.	697	24	104	54	879	23,458 00	26 67	Contract.
Ponton, A. W.		110			110	7,385 35	67 14	Day.
Reilly, W. R.			92	710	802	7,560 30	9 43	"
Richard, J. F.			25		25	2,000 00	80 00	"
Rinfret, R.	294	63	159		516	10,320 00	20 00	Contract.
Ross, J. E.	103	16	104	28	251	7,705 79	30 70	Day.
Roy, G. P.	294	28	75		397	9,424 00	23 74	Contract.
Saint Cyr, A.		146			146	16,434 00	112 56	Day.
Saint Cyr, J. B.			106	50	156	3,951 50	25 33	"
Saunders, B. J.		46			46	9,034 00	196 39	"
Selby, H. W.	246	84	7		337	10,867 00	32 25	"
Teasdale, C. M.	394		59		453	3,603 00	7 95	Contract.
Tyrell, J. W.	502	30	8	24	564	17,162 00	30 43	"
Wallace, J. N.		133	6	13	152	16,764 69	110 29	Day.
Warren, Jas.			5	467	472	3,850 65	8 16	"
Watt, G. H.	90	4	2	12	108	3,222 72	29 84	Contract.
Total	9,862	1,306	1,848	4,948	17,064	435,618 32	24 72	

(a) Inspector of contract surveys. (b) Inspecting contract surveys a portion of the season.

Total cost..... \$435,618 32
 " Mileage..... 17,064 00
 Cost per mile..... \$ 24 72

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APPENDIX No. 3.

LIST of Dominion Land Surveyors who have been supplied with Standard Measures.

Name.	Address.	Date of Appointment.	Remarks.
Austin, G. F.	Dewdney, Alta.	April 14, '72.	
Aylen, J.	Aylmer, Que.	May 29, '85.	
Aylsworth, C. F.	Madoc, Ont.	" 17, '86.	
Baker, J. C.	Vermilion, Alta.	" 18, '06.	
Barwell, C. S. W.	Dawson, Yukon Territory.	Aug. 21, '94.	
Bayne, G. A.	Winnipeg, Man.	April 14, '72.	
Beatty, D.	Parry Sound, Ont.	" 14, '72.	
Beatty, W.	Delta, Ont.	" 14, '72.	
Belanger, P. R. A.	Ottawa, Ont.	May 17, '80.	Topog. Surveys Branch Dept. of Interior.
Belleau, J. A.	"	" 15, '83.	Topog. Surveys Branch Dept. of Interior.
Bigger, C. A.	"	Mar. 30, '82.	Astronomer, Dept. of Interior.
Bolton, L.	Listowel, Ont.	April 14, '72.	
Boswell, E. J.	Winnipeg, Man.	Feb. 18, '03.	
Bourgault, A.	St. Jean Port Joli, Que.	Mar. 29, '83.	
Bourgault, C. E.	" "	Feb. 21, '88.	
Bourget, C. A.	Levis, Que.	May 14, '84.	
Bowman, H. J.	Berlin, Ont.	Feb. 16, '88.	
Brabazon, A. J.	Ottawa, Ont.	May 12, '82.	
Brady, J.	Golden, B.C.	April 14, '72.	
Bray, S.	Ottawa, Ont.	Nov. 14, '83.	Dept. of Indian Affairs.
Bray, E.	Oakville, Ont.	April 14, '72.	
Bray, L. T.	Amherstburg, Ont.	Feb. 18, '03.	
Bridgland, M. P.	Calgary, Alta.	Mar. 10, '05.	Topog. Surveys Branch Dept. of Interior.
Brodie, S.	Fort Qu'Appelle, Sask.	April 14, '72.	
Brownlee, J. H.	Victoria, B. C.	" 15, '87.	
Burke, W.	Minnedosa, Man.	" 14, '72.	
Burnet, H.	Victoria, B.C.	June 22, '85.	
Buiwash, N. A.	Whitehorse, Yukon Territory.	Mar. 6, '07.	
Burwell, H. M.	Vancouver, B.C.	Feb. 17, '87.	
Carbert, J. A.	Medicine Hat, Alta.	May 12, '80.	
Carpenter, H. S.	Regina, Sask.	Feb. 20, '01.	Dept. of Public Works for Saskatchewan.
Carroll, C.	Prince Albert, Sask.	April 14, '72.	
Carson, P. A.	Ottawa, Ont.	Feb. 22, '06.	Topog. Surveys Branch Dept. of Interior.
Cautley, R. H.	Edmonton, Alta.	May 1, '05.	
Cautley, R. W.	"	Sept. 2, '96.	
Cavana, A. G.	Orillia, Ont.	Nov. 16, '76.	
Charlesworth, L. C.	Edmonton, Alta.	Feb. 27, '03.	Dept. of Public Works for Alberta.
Christie, W.	Chesley, Ont.	Mar. 22, '06.	
Cleveland, E. A.	Vancouver, B.C.	June 27, '99.	
Côté, J. A.	Quebec, Que.	May 14, '84.	
Côté, J. L.	Edmonton, Alta.	Mar. 21, '90.	
Cotton, A. F.	New Westminster, B.C.	May 11, '80.	
Craig, J. D.	Ottawa, Ont.	Feb. 24, '02.	Boundary Surveys, Dept. of Int.
Cummings, J. G.	Calgary, Alta.	" 17, '04.	
Dalton, J. J.	Weston, Ont.	April 17, '79.	Dominion Topographical Surveyor.
Deans, W. J.	Brandon, Man.	May 13, '86.	
Dennis, J. S.	Calgary, Alta.	Nov. 19, '77.	Dominion Topographical Surveyor, Inspector of Irrigation and British Columbia Land Commissioner, C.P.R.
Denny, H. C.	"	April 1, '82.	
Dickson, H. G.	Whitehorse, Yukon Territory.	May 19, '89.	
Dickson, J.	Fenelon Falls, Ont.	April 14, '72.	
Dobie, J. S.	Regina, Sask.	Mar. 22, '06.	Dept. of Public Works for Saskatchewan.

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APPENDIX No. 3.—List of Dominion Land Surveyors who have been supplied with Standard Measures.—*C continued.*

Name.	Address.	Date of Appointment.	Remarks.
Doupe, J.	Winnipeg, Man.	April 14, '72.	
Doupe, J. L.	"	Oct. 6, '88.	Asst. Land Commissioner C.P.R.
Drewry, W. S.	New Denver, B.C.	Nov. 14, '83.	
Driscoll, A.	Edmonton, Alta.	Feb. 23, '87.	
Drummond, T.	Montreal, Que.	June 24, '78.	Dominion Topographical Surveyor.
Ducker, W. A.	Winnipeg, Man.	Mar. 30, '83.	Swamp Land Commissioner.
Dumais, P. T. C.	Hull, Que.	" 29, '82.	
Edwards, Geo.	Ponoka, Alta.	April 14, '72.	
Ellacott, C. H.	Regina, Sask.	Feb. 22, '99.	
Fairchild, C. C.	Brantford, Ont.	" 20, '01.	
Farncomb, A. E.	Red Deer, Alta.	Mar. 12, '02.	
Fawcett, T.	Niagara Falls, Ont.	Nov. 18, '76.	Dominion Topographical Surveyor.
Fawcett, A.	Gravenhurst, Ont.	Feb. 22, '93.	
Fontaine, L. E.	Levis, Que.	Aug. 13, '92.	
Foster, F. L.	Toronto, Ont.	" 14, '72.	
Francis, J.	Poplar Point, Man.	June 17, '75.	
Garden, J. F.	Vancouver, B. C.	May 13, '80.	
Garden, G. H.	Lethbridge, Alta.	April 14, '72.	
Garden, C.	Winnipeg, Man.	" 14, '72.	
Gauvreau, L. P.	Riviere du Loup, Que.	" 14, '72.	
Gibbon, J.	Dawson, Yukon Territory.	Feb. 12, '91.	
Gordon, M. L.	Toronto, Ont.	" 18, '04.	
Gordon, R. J.	Stirling, Alta.	Mar. 12, '02.	
Gore, T. S.	Victoria, B.C.	April 19, '79.	
Green, T. D.	Dawson, Yukon Territory.	May 19, '84.	
Grover, G. A.	Toronto, Ont.	Feb. 18, '04.	
Harris, J. W.	Winnipeg, Man.	April 14, '72.	City Surveyor, Winnipeg.
Harvey, C.	Indian Head, Sask.	Feb. 17, '04.	
Hawkins, A. H.	Listowel, Ont.	Mar. 6, '06.	
Henderson, W.	Chilliwack, B.C.	Nov. 17, '83.	
Holcroft, H. S.	Toronto, Ont.	Feb. 18, '03.	
Hopkins, M. W.	Edmonton, Alta.	" 20, '01.	
Hubbell, E. W.	Ottawa, Ont.	May 19, '84.	Topographical Surv. Br., Dep. of Int. President of the D. L. S. Association.
Irwin, J. M.	Kenora, Ont.	April 14, '72.	
James, S.	Toronto, Ont.	" 14, '72.	
Jephson, R. J.	Winnipeg, Man.	May 12, '80.	
Johnson, A. W.	Kamloops, B.C.	Mar. 12, '02.	
King, W. F.	Ottawa, Ont.	Nov. 21, '76.	Dominion Topographical Surveyor, Chief Astronomer, Dept. of Interior.
Kirk, J. A.	Revelstoke, B.C.	May 11, '80.	
Klotz, O. J.	Ottawa, Ont.	Nov. 19, '77.	Dominion Topographical Surveyor, Astronomer, Dept. of the Interior.
Knight, R. H.	Edmonton, Alta.	Feb. 18, '04.	
Latimer, F. H.	Detroit, Mich.	" 13, '85.	
Laurie, R. C.	Battleford, Sask.	April 27, '83.	
Lawe, H.	Ottawa, Ont.	" 14, '72.	
Lemoine, C. E.	Quebec, Que.	Mar. 31, '82.	
Lendrum, R. W.	Strathcona, Alta.	May 15, '80.	
Loneragan, G. J.	Buckingham, Que.	Feb. 28, '01.	
Lumsden, H. D.	Ottawa, Ont.	April 14, '72.	Chief Engineer Transcontinental Railway.
Macpherson, C. W.	Dawson, Yukon Territory.	Mar. 7, '00.	Director of Surveys Y. T.
Magrath, C. A.	Lethbridge, Alta.	Nov. 16, '81.	Dominion Topographical Surveyor, Land Commissioner, Alberta Railway and Coal Co.
Malcolm, L.	Blenheim, Ont.	April 14, '72.	
Meadows, W. W.	Maple Creek, Sask.	Feb. 23, '05.	District Surveyor and Town Engineer.
Miles, C. F.	Toronto, Ont.	April 14, '72.	
Moberly, H. K.	Innisfail, Alta.	Feb. 27, '03.	
Molloy, J.	Winnipeg, Man.	April 14, '72.	
Montgomery, R. H.	Prince Albert, Sask.	Feb. 23, '05.	
Moore, H. H.	Calgary, Alta.	" 17, '04.	
McArthur, J. J.	Ottawa, Ont.	" 17, '79.	

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APPENDIX No. 3.—List of Dominion Land Surveyors who have been supplied with Standard Measures.—*Continued.*

Name.	Address.	Date of Appointment.	Remarks.
McColl, G. B.	Winnipeg, Man.	Mar. 20, '07	
McFadden, M.	Neepawa, Man.	Feb. 14, '72	
McFarlane, W. G.	Toronto, Ont.	May 19, '05	
McFee, A.	Innisfail, Alta.	Feb. 19, '79	
McGrandle, H.	Wetaskiwin, Alta.	May 30, '83	
McKenna, J. J.	Dublin, Ont.	April 14, '72	
McKenzie, J.	New Westminster, B.C.	Nov. 18, '88	Dominion Lands Agent, New Westminster.
McLatchie, J.	Nelson, B.C.	April 14, '72	
McLean, J. K.	Ottawa, Ont.	" 1, '82	Dept. of Indian Affairs.
MacLennan, A. L.	Toronto, Ont.	Feb. 23, '05	
McMillan, G.	Ottawa, Ont.	" 22, '06	Inspector of Surveys, Dept. of Interior.
McPherson, A. J.	Dawson, Yukon Ter.	" 21, '01	
McPhillips, G.	Windsor, Ont.	June 17, '75	
McVittie, A. W.	Blairmore, Alta.	Mar. 30, '82	
Nash, T. S.	Ottawa, Ont.	Feb. 18, '04	Topographical Surveys Branch, Dept. of Interior.
Ogilvie, W.	"	April 14, '72	
O'Hara, W. F.	"	Feb. 19, '05	
Ord, L. R.	Winnipeg, Man.	April 1, '82	
Parsons, J. L. R.	"	Feb. 23, '05	
Patrick, A. P.	Calgary, Alta.	Nov. 19, '77	Dominion Topographical Surveyor.
Pearce, W.	"	May 10, '80	
Phillips, E. H.	Ottawa, Ont.	Feb. 24, '02	Topographical Surveys Branch, Dept. of Int.; Sec.-Treas. D.L.S. Association.
Ponton, A. W.	Macleod, Alta.	May 18, '81	
Proudfoot, H. B.	Saskatoon, Sask.	Mar. 28, '82	
Rainboth, E. J.	Ottawa, Ont.	May 19, '81	
Rainboth, G. C.	Aylmer, Que.	April 14, '72	Boundary Surveys, Dept. of Int.
Reid, J. L.	Ottawa, Ont.	" 14, '72	Dept. of Indian Affairs.
Reilly, W. R.	Regina, Sask.	Nov. 17, '81	
Richard, J. F.	Ste. Anne de la Pocatiere, Que.	May 13, '82	
Rinfret, R.	Montreal, Que.	Feb. 20, '00	
Ritchie, J. F.	Nelson, B.C.	Jan. 7, '89	
Robertson, H. H.	Montmagny, Que.	April 14, '72	
Roberts, S. A.	Victoria, B.C.	May 16, '85	
Roberts, V. M.	Sturgeon Falls, Ont.	" 17, '86	
Robinson, F. J.	Regina, Sask.	Feb. 22, '00	Dept. of Public Works for Saskatchewan.
Rombough, M. B.	Morden, Man.	April 14, '72	
Rorke, L. V.	Toronto, Ont.	Aug. 13, '91	
Ross, G.	Welland, Ont.	Nov. 21, '82	
Ross, J. E.	Kamloops, B.C.	Feb. 12, '01	
Roy, G. P.	Quebec, Que.	Nov. 17, '81	
Saint Cyr, J. B.	Ste. Anne de la Perade, Que.	Feb. 17, '87	
Saint Cyr, A.	Ottawa, Ont.	" 17, '87	
Saunders, B. J.	Edmonton, Alta.	Nov. 16, '84	
Seager, E.	Kenora, Ont.	April 14, '72	
Selby, H. W.	Toronto, Ont.	Nov. 15, '82	
Sewell, H. de Q.	"	May 16, '85	
Shaw, C. A. E.	Victoria, B.C.	" 10, '80	
Smith, C. C.	West Selkirk, Man.	Feb. 22, '06	
Speight, Thos.	Toronto, Ont.	Nov. 16, '82	
Starkey, S. M.	Starkey's P.O., N.S.	April 14, '72	
Stewart, G. A.	Calgary, Alta.	" 14, '72	
Stewart, L. B.	Toronto, Ont.	Nov. 22, '82	Dominion Topographical Surveyor; Professor of Surveying, School of Practical Science.
Stewart, E.	Ottawa, Ont.	April 14, '72	
Talbot, A. C.	Calgary, Alta.	May 13, '80	
Teasdale, C. M.	Concord, Ont.	Mar. 9, '06	
Thompson, W. T.	Fort Qu'Appelle, Sask.	Nov. 19, '77	Dominion Topographical Surveyor.
Tracy, T. H.	Vancouver, B.C.	April 14, '72	City Engineer, Vancouver.
Tremblay, A. J.	Les Eboulements, Que.	Feb. 18, '96	
Towle, C. E.	Magog, Que.	April 14, '72	
Turnbull, T.	Winnipeg, Man.	Mar. 29, '82	

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APPENDIX No. 3.—List of Dominion Land Surveyors who have been supplied with Standard Measures.—*Concluded.*

Name.	Address.	Date of Appointment.	Remarks.
Tyrrell, J. W.....	Hamilton, Ont.....	Feb. 16, '87..	Dept. of Public Works for Saskatchewan.
Vaughan, J. W.....	Vancouver, B.C.....	June 11, '78..	
Vicars, J.....	Kamloops, B.C.....	May 17, '86..	
Walker, E. W.....	Regina, Sask.....	Mar. 27, '07..	
Wallace, J. N.....	Calgary, Alta.....	Feb. 20, '00..	Topographer of the Dept. of Int.
Warren, J.....	Walkerton, Ont.....	April 14, '72..	
Watt, G. H.....	Ottawa, Ont.....	Feb. 24, '02..	
Weekes, A. S.....	Clinton, Ont.....	" 11, '92..	
Weekes, M. B.....	Ottawa, Ont.....	" 18, '03..	Dominion Topographical Surveyor.
Wheeler, A. O.....	Calgary, Alta.....	Nov. 21, '82..	
White-Fraser, G. W.R.	Ottawa, Ont.....	Feb. 21, '88..	
Wiggins, T. H.....	Regina, Sask.....	" 18, '96..	
Wilkins, F. W.....	Norwood, Ont.....	May 18, '81..	Dominion Topographical Surveyor.
Wilkinson, W. D.....	Toronto, Ont.....	Feb. 22, '93..	
Woods, J. E.....	Frank, Alta.....	Nov. 14, '85..	
Young, W. B.....	Winnipeg, Man.....	Mar. 25, '05..	

SESSIONAL PAPER No. 25

APPENDIX No. 4.

LIST of lots in the Yukon Territory surveys of which have been confirmed from July 1st, 1906, to March 31st, 1907.

Lot No.	Area in Acres.	Surveyor.	Year of Survey.	Date of Approval.	Claimant.
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GROUP No. 1.

35	160.00	C. S. W. Barwell...	1906	Nov. 24, 1906..	Messrs. Simer, McRae, Boggs & Carlsen
36	80.00	"	1906	" 24, 1906..	" " " "
37	159.00	"	1906	" 24, 1906..	" " " "
38	20.00	"	1906	" 24, 1906..	" " " "
39	20.00	"	1906	" 24, 1906..	" " " "

GROUP No. 2.

265	15.80	T. D. Green.....	1906	Nov. 12, 1906..	The Klondike Mines R. R. Co.
279	28.01	"	1906	July 5, 1906..	Dawson City Quartz Mining Co. Ltd.
280	45.80	"	1906	" 9, 1906..	" " " "
296	51.52	"	1906	Oct. 19, 1906..	Peter Anderson.
297	51.65	"	1906	" 19, 1906..	" " " "
343	47.33	"	1906	" 30, 1906..	Mrs. M. J. Mitchell.
344	57.65	"	1906	" 30, 1906..	" " " "
365	51.65	"	1905-06	" 19, 1906..	Mrs. L. D. Schmidt.

APPENDIX No. 5.

LIST of miscellaneous surveys in the Yukon Territory returns for which have been received during the nine months ending March 31st, 1907.

Year.	Surveyor.	Description of Survey.
1906	H. G. Dickson.....	Reference traverse from the B. C. Boundary at Windy. Arm to Carcross, at Caribou Crossing.

APPENDIX No. 6.

STATEMENT of work executed in the office of the chief draughtsman.

Returns of surveys examined:—

Township subdivision..	354
Township outline..	122
Mineral claims..	17
Correction and other miscellaneous surveys..	256
Township plans completed for printing..	451
Preliminary township plans prepared..	179
Proofs of plans examined..	541
Sketches made..	946
Tracings and miscellaneous plans made..	718
Applications for various information dealt with..	1,026
Instructions to surveyors..	86
Files received and returned..	940
Progress sketches received and filed..	630
Field books received from surveyors..	365
Plans received from surveyors..	169
Plans of Yukon lots received..	13
Plans of miscellaneous Yukon surveys received..	1
Sectional maps revised but not reprinted..	5

Sectional maps revised and reprinted:—

3 miles to 1 inch..	22
6 miles to 1 inch..	24

Sectional maps printed:—

3 miles to 1 inch..	2
6 miles to 1 inch..	3
Sectional maps reprinted 3 miles to 1 inch..	6
Declarations of settlers received and filed..	382
Reference traverses drawn on group plans of Yukon Territory..	1
Mineral claims reduced to 40 chains to an inch and plotted on group plans of Yukon Territory..	2
Books sent to record office to be placed on record..	649
Plans, other than township plans, sent to record office to be placed on record..	81
Books received from record office and used in connection with office work..	3,446
Books returned to record office..	3,586
Volumes of plans received from record office and used in connection with office work..	38
Volumes of plans returned to record office..	54
Plans received from record office and used in connection with office work..	372
Plans returned to record office..	303

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APPENDIX No. 7.

LIST of sectional maps revised, printed, reprinted, and revised and reprinted from July 1, 1906, to March 31, 1907.

1. Sectional maps revised but not reprinted:—

Port Moody.	Rosebud.
Cypress.	Duck Mountain.
Fairford.	

2. Sectional maps compiled and printed.

(a) On a scale of 6 miles to 1 inch:—

Lake of the Woods.

(b) On scales of 3 miles and 6 miles to 1 inch:—

Cross Lake.	Mossy Portage.
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3. Sectional maps reprinted on a scale of 3 miles to 1 inch:—

Macleod.	Rocky Mountain House.
Blackfoot.	Humbolt.
Rush Lake.	Pasquia.

4. Sectional maps revised and reprinted.

(a) On a scale of 3 miles to 1 inch:—

Wood Mountain.	Portage la Prairie.
Willow Bunch.	Red Deer Forks.
Souris.	Regina.
Dufferin.	Qu'Appelle.
Swift Current.	Riding Mountain.
Moosejaw.	Manitoba House.
Moose Mountain.	Fort Alexander.
Brandon.	Sounding Creek.
Bad Hills.	Fort Pitt.
Yorkton.	Shell River.
Carlton.	Prince Albert North.

(b) On a scale of 6 miles to 1 inch:—

Wood Mountain.	Winnipeg.
Souris.	Spillimacheen.
Turtle Mountain.	Blackfoot.
Dufferin.	Red Deer Forks.
Emerson.	Rush Lake.
Macleod.	Regina.
Moose Mountain.	Qu'Appelle.
Portage la Prairie.	Riding Mountain.
Manitoba House.	Yorkton.
Fort Alexander.	Rocky Mountain House.
Sounding Creek.	Humbolt.
Bad Hills.	Pasquia.

APPENDIX No. 8.

STATEMENT of work performed in the survey records office for the nine months ending
March 31, 1907.

Files received and dealt with.. . . .	5,307
Letters drafted.. . . .	3,118
Reports, drafts, memos to council.. . . .	.....
Plans, tracings, &c., copied or compiled.. . . .	315
Statutory declarations, copied and mailed.. . . .	356
Plans sent to agents, registrars, &c.. . . .	19,911
Pages of field notes copied.. . . .	875
Prints of plans received and stored.. . . .	87,112
Original plans received and recorded.. . . .	657
Original field notes received and recorded.. . . .	540
Letters written to agents.. . . .	958
Registered parcels mailed.. . . .	1,281

Work done for Topographical Surveys and other branches.

Books searched for.. . . .	5,028
Books sent.. . . .	3,394
Books returned.. . . .	3,920
Plans searched for.. . . .	1,789
Plans sent.. . . .	1,421
Plans returned.. . . .	514
Volumes searched for.. . . .	86
Volumes sent.. . . .	55
Volumes returned.. . . .	45

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APPENDIX No. 9.

STATEMENT of work executed in the photographic office during the nine months ending
March 31, 1907.

FOR THE DEPARTMENT OF THE INTERIOR.

—	4 x 5.	5 x 7.	8 x 10.	10 x 12.	11 x 14.	16 x 18.	18 x 20.	24 x 30.	30 x 36.	36 x 42.	42 x 48.	Total.
Dry plate negatives	328	204	6	.....	.....	.....	.....	.....	.....	.....	.....	538
Bromide prints....	375	317	127	.....	571	12	91	131	14	12	.....	1,650
Vandyke prints....	.....	.....	49	3	79	5	27	27	8	3	13	214
Silver prints.....	906	692	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,598
Photo-lithographs..	.....	.....	.....	.....	6	.....	648	.....	.....	.....	.....	654
Wet plate negatives	.....	.....	66	.....	82	616	94	.....	.....	.....	.....	858
Total.....	1,609	1,213	248	3	738	633	860	158	22	15	13	5,512

FOR THE GEOLOGICAL SURVEY.

—	4 x 5.	5 x 7.	8 x 10.	10 x 12.	11 x 14.	16 x 18.	18 x 20.	24 x 30.	30 x 36.	36 x 42.	42 x 48.	Total.
Dry plate negatives	30	135	..	.....	.....	.....	.....	.....	.....	.....	.....	165
Bromide prints....	.....	.....	4	.....	232	6	.....	.....	.....	.....	.....	242
Silver prints.....	19	249	.....	.....	.....	.....	.....	.....	.....	.....	.....	268
Wet plate negatives	.....	.....	.....	.....	1	1	.....	.....	.....	.....	.....	2
Total.....	49	384	4	.....	233	7	.....	.....	.....	.....	..	677

SESSIONAL PAPER No. 25

APPENDIX No. 10.

STATEMENT of work executed in the lithographic office during the nine months ending March 31, 1907.

Month.	Maps.		Townships.		Forms.	
	No.	Copies.	No.	Copies.	No.	Copies.
1906.						
July	5	2,150	60	6,000	1	140
August	4	1,200	35	3,500	9	5,925
September	5	2,300	55	5,500	6	925
October	19	6,250	73	7,300	5	1,280
November	6	1,950	63	6,300	6	4,580
December	5	1,950	59	5,900	9	5,760
1907.						
January	7	3,800	105	10,500	5	2,026
February	9	6,300	55	5,500	7	824
March	3	662	35	3,500	8	3,950
Totals	64	26,562	540	54,000	56	25,410

SUMMARY OF WORK FOR THE NINE MONTHS.

	Number of Jobs.	Number of Copies.	Number of Impressions.	Cost.	Cost per map or form.
				8 cts.	8 cts.
Maps	64	26,562	45,686	1,319 40	20 61
Townships	540	54,000	54,500	3,715 20	6 88
Forms, &c.	56	25,460	28,670	631 40	11 27
Totals	660	106,022	128,856	5,666 00	

APPENDIX No. 11.

Names and duties of employees of the Topographical Surveys Branch at Ottawa.
(Metcalf street, corner of Slater street).

Déville, E., D.T.S., LL.D., Surveyor General.

CORRESPONDENCE AND ACCOUNTS.

Brady, M., secretary.
Hunter, R. H., accountant.
Wilkinson, Percy, assistant accountant.
Percival, M. F., stenographer and typewriter.
Cullen, M. J., stenographer and typewriter.
Pegg, A., messenger.
O'Leary, James J., messenger.

OFFICE OF THE CHIEF DRAUGHTSMAN.

Symes, P. B., chief draughtsman.
Shanks, T., B.A.Sc., D.L.S., assistant to chief draughtsman.

First Division—Instructions and General Information.

Brown, T. E., B.A., in charge of division.
Stacey, A. G., B.A., D.L.S., O.L.S.
Sylvain, J.
Green, W. T., B.A., D.L.S.
Durnford, F. G. D.
Weekes, M. B., B.A.Sc., O.L.S., D.L.S.
Mudie, J. M., Grad. R.M.C.
Carroll, M. J., Grad. S.P.S.
Cumming, A. L., B.Sc.
Seymour, H. L., Grad. S.P.S., D.L.S., O.L.S.
Umbach, J. E., Grad. S.P.S., D.L.S.
Dodge, G. B.
Burkholder, E. L.
Fitzgerald, C. C.
Kimpe, M.

Second Division—Examination of Surveyors' Returns.

Phillips, E. H., Grad. S.P.S., D.L.S., in charge of division.
Nash, T. S., Grad. S.P.S., D.L.S.
Empey, J., B.A.Sc., D.L.S., O.L.S.
Henderson, F. D., Grad. S.P.S., D.L.S.
Barber, H. G., Grad. S.P.S.
Burgess, E. L., Grad. S.P.S., O.L.S., D.L.S.
Hill, S. N., Grad. S.P.S.

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Dennis, E. M., B.Sc.
Elder, A. J., Grad. S.P.S.
Morrier, J. E.
Chilver, H. L., Grad. S.P.S.
McClennan, W. D.
Cram, A. S.
Owens, R. B., B.A., B.E.
Davies, T. A., D.L.S.
Elwell, W., Grad. S.P.S.
Roger, A.
Clunn, T. H. G.
Robertson, D. F., Grad. S.P.S.
Goodall, J. N., Grad. S.P.S.
Heathcott, R. V.
Rochon, J. W.
Macdonald, J. A.
Spreckley, R. O.
Marriott, F. L.
Brice, E. E.
Smith, C. C., B.A., D.L.S., O.L.S.

Third Division—Drawing Plans for Printing.

Engler, Carl, B.A., D.L.S., in charge of division.
O'Connell, J. R.
May, J. E.
Archambault, E.
Helmer, J. D.
Moule, W. J.
Bergin, W.
Hutton, J. B.
Moran, J. F.
Villeneuve, E. J.
Brown, A.
Tremblay, A.
Ball, J. C.
Shore, S. H.
Williams, E. R.

Fourth Division—British Columbia Surveys.

Rowan-Legg, E. L., in charge of division.
Gillmore, E. T. B., Grad. R.M.C.
Lawe, H., D.L.S.
Morley, R. W.
MacIlquham, W. L., B.Sc.
Weld, W. E.
Wilson, E. E. D.
Carson, P. A., B.A., D.L.S.

Fifth Division, 185 Sparks street—Mapping.

Smith, Jacob, in charge of division.
Bégin, P. A.
Lepage, J. B.

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Blanchet, A. E.
Grey, G. A.
Davies, T. E. S.
Belleau, J. A., D.L.S.
Taggart, C. H.
Perrin, V.
Smith, H. J.
Genest, P. F. X.

OFFICE OF THE GEOGRAPHER.

(Woods building, Slater street).

White, J., geographer.
Baine, H. E.
Chalifour, J. E.
Dumouchel, G. E.
Taché, H.
Darrach, M.
Wilson, H. W.
Akerlindh, A.
Anderson, W.
Blatchley, H. M.
Bennie, J.
Wood, C. G.
Craig, R. W.
Chandler, S.
Groulx, A.
Gagnon, J. S.
Inkster, F. B.
Blue, W.

SURVEY RECORDS OFFICE.

(Canadian building, Slater street).

Steers, C. J., clerk in charge.
Currie, P. W., B.A., B.Sc., D.L.S., assistant clerk in charge.
Surtees, W. S., draughtsman.
Sowter, T. W. E., draughtsman.
Smith, F. W., draughtsman.
Routh, C. F., draughtsman.
Ashton, A. W., draughtsman.
Lecourt, Eugène, draughtsman.
Moore, R. T., draughtsman.
Lambart, O. H., draughtsman and typewriter.
Belleau, Eugène, draughtsman.
Yielding, Miss A., typewriter.
Landry, Narcisse, messenger.

LITHOGRAPHIC OFFICE.

(Metcalf street, corner of Slater street).

Moody, A., foreman.
Thicke, H., power press printer.
Bergin, J., transferrer.

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Boyle, S., stone polisher.
Gagnon, J., press feeder.
Thicke, C., engraver and lithographer.

PHOTOGRAPHIC OFFICE.

(Metcalf street, corner of Slater street).

Topley, H. N., photographer in charge.
Carruthers, H. K., photo-lithographer and photo-engraver.
Woodruff, J., photographer.
Whitcomb, H. E., photographer.
Morgan, W. E., photographer.
Kilmartin, A., photographer.
Devlin, A., photographer.
Ouimet, Geo., photographer.

GEOGRAPHIC BOARD.

(Woods building, Slater street).

Whitcher, A. H., D.L.S., secretary.

PART IV

REGISTRARS

REGISTRARS.

No. 1.

REPORT OF THE REGISTRAR AT BATTLEFORD.

STATEMENT of transactions at the Land Titles Office for the West Saskatchewan Land Registration District, Battleford, Sask., from July 1, 1906, to September 7, 1906.

Year and Month.	Free Certificates Issued.	Total Certificates Issued.	Total Instruments Registered.	FEES COLLECTED.				TOTAL FEES.
				For Certificates of Title.	For Registration of Instruments.	For Searches, Abstracts, Copies, &c.	For Assurance Fee.	
1906.				\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.....	64	93	122	114 50	87 00	90 85	110 75	403 10
August.....	24	66	83	157 00	42 50	54 40	109 10	363 00
Sept. (1st 7 days)	7	16	23	39 00	11 50	17 50	35 85	103 85
Totals... ..	95	175	228	310 50	141 00	162 75	255 70	869 95
1905 (same period).....	5	49	66	165 00	24 00	49 50	124 97	363 47
Increase	90	126	162	145 50	117 00	113 25	130 73	506 48

J. W. HANNON,
Registrar.

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No. 2.

REPORT OF THE REGISTRAR AT CALGARY.

COMPARATIVE STATEMENT of registrations, &c., &c., in the Land Titles Office, South Alberta Land Registration District, Calgary, from July 1, to September 7, 1906.

Year and Month.	Number of Instruments Registered.	Free Certificates Only.	Aggregate Number of Certificates.	Assurance Fees.	Total Fees.
1906.				\$ cts.	\$ cts.
July.....	1,011	284	778	1,802 35	4,894 45
August.....	1,335	333	1,036	1,263 95	4,573 15
September.....	212		116	260 30	869 05
	2,558	617	1,930	3,326 60	10,336 65
1905.					
July..	598	132	415	459 20	1,886 50
August.....	670	154	482	658 65	2,245 55
September..	115		75	160 65	502 85
	1,383	286	970	1,278 50	4,624 90

W. ROLAND WINTER,

Registrar.

CALGARY, ALBERTA.

No. 3.

REPORT OF THE REGISTRAR AT DAWSON.

LAND TITLES OFFICE,

DAWSON, Y.T., April 8, 1907.

The Secretary,

Department of the Interior,

Ottawa, Ont.

SIR,—According to your circular of March 18, 1907, I have the honour to acknowledge the same, and to inclose at your request the report of the transactions of my branch of the department for the fiscal nine months ending March 31, 1907.

Your obedient servant,

A. DUGAS,

Deputy Registrar.

STATEMENT of fees received at the Land Titles Office for the Yukon Land Registration District, from July 1, 1906, to March 31, 1907.

Year and Month.	Deeds Recorded.	Certificates of Title Issued.	Fees.	Assurance Fund.	Total Fees.
			\$ cts.	\$ c s.	\$ c s.
1906, July... ..	72	39	320 75	46 80	367 55
" August...	54	37	271 48	19 82	291 30
" Sept.	74	38	313 40	28 20	341 60
" October ..	47	26	204 15	13 00	217 15
" Nov.	36	19	173 85	2 60	176 45
" Dec.	18	14	102 60	4 55	107 15
1907, Jan.	20	4	65 80	2 10	67 90
" Feb.	23	30	86 65	4 05	90 70
" March.	90	55	466 10	10 65	476 75
	434	262	2,004 78	131 77	2,136 55

Certified true and correct.

A. DUGAS,

Deputy Registrar.

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No. 4.

REPORT OF THE REGISTRAR AT EDMONTON.

NORTH ALBERTA LAND REGISTRATION DISTRICT,
EDMONTON, ALBERTA, July 27, 1907.

The Secretary,
Department of the Interior,
Ottawa, Ont.

SIR,—I have the honour to inclose herewith statement covering returns of this office from June 30, 1906, up to and including September 7, 1906, the latter being the date at which this office passed under the provincial government of Alberta.

I have the honour to be, sir,

Your obedient servant,

GEO. ROY,
Registrar.

STATEMENT of fees received by the Registrar of the North Alberta Land Registration District, from July 1, 1906, to September 7, 1906.

Month.	Amount.	Total.
	\$ cts.	\$ cts.
July..	5,102 15	
August..	4,326 65	
1st to 7th September..	1,003 10	
		10,431 90

NOTE.—The sum of \$103, due by the City of Edmonton for searches made during the above period, was received on the 24th July, 1907, and will appear in Statement of 1907-08.

GEO. ROY,
Registrar.

No. 5.

REPORT OF THE REGISTRAR AT PRINCE ALBERT.

REPORT of the East Saskatchewan Land Registration District, from July 1, 1906,
to September 7, 1906, inclusive.

Month.	No. of Instruments	No. free Certificates Issued.	Total No. Certificates Issued	Assurance Fees.	General Fees.	Total Fees.
				\$ cts.	\$ cts.	\$ cts.
July.....	488	30	280	422 10	1,357 00	1,779 10
August.....	670	167	466	484 05	1,496 45	1,980 50
7 days, September ..	90	19	71	97 15	249 75	346 90
Total	1,254	216	817	1,003 30	3,103 20	4,106 50

This shows an increase over the corresponding period of 1905 of \$584.70 in the insurance fund fees, \$1,968 in the total fees.

Certified correct,

S. BREWSTER,

Registrar.

No. 6.

REPORT OF THE REGISTRAR AT REGINA.

REGISTRATION DISTRICT OF ASSINIBOIA, LAND TITLES OFFICE,
REGINA, SASK., March 25, 1907.

The Secretary,
Department of the Interior,
Ottawa, Ont.

SIR,—I beg to report as follows regarding the work of the Land Titles Office for the Assiniboia Land Registration district for the portion of the year between June 30, 1906, and September 8, 1906, both dates exclusive, being the final report of the work of this office to the Department of the Interior, and embracing the period not included in previous reports. The following is a statement of fees received during the said period:—

July.. . . .	\$8,538 30
August.. . . .	8,049 60
To September 8.. . . .	1,654 75
	<hr/>
	\$18,242 65

In connection with this total, there has already been sent to your department the usual detailed monthly, and in this case, also a portion of the monthly statement, which will be found to verify these details and will give such details as to the amount of the assurance fund, &c., that may be required by you.

During this portion of time the average number of free certificates were issued, besides which the volume of free work done for the then territorial government, kept constantly increasing, with the result that the Registrar found it almost impossible to keep up the work as it should have been kept up.

I have the honour to be, sir,

Your obedient servant,

F. F. FORBES,

Registrar.

PART VI

ROCKY MOUNTAINS PARK OF CANADA.

ROCKY MOUNTAINS PARK OF CANADA.

REPORT OF THE SUPERINTENDENT.

BANFF, ALBERTA, August 1, 1907.

The Hon. FRANK OLIVER,
Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit for your consideration my annual report as Superintendent of the Rocky Mountains Park of Canada for the fiscal year ending March 31, 1907.

Owing to the change in the ending of the fiscal year from June 30 to March 31, we have only had nine months during the past year, and out of this have only had about four months during which work of construction and repairs could be carried on in the park. The time during which this work could be carried on with profit extended from July 1 to October 31, though during the winter months a number of men were employed in making sewer and water connections.

The increasing popularity of the park is evidenced by the largely increased number of tourists who have visited it, the travel for the nine months of the fiscal year showing an increase over that of the preceding twelve months. The revenue of the park also shows a marked increase over the corresponding nine months of the previous year.

ROADS, BRIDGES, ETC.

After the work on the waterworks and sewer systems was completed last fall, the streets were left in such a condition as to necessitate regrading in almost the entire town limits. The main street in Banff has all been regraded and gravelled and boulevards eight feet in width have been constructed on each side of the street for two blocks, and seeded with Kentucky blue grass and clover, which makes it present a much more attractive appearance than formerly.

As a large number of cottages and residences were erected during the past year, this necessitated the opening up and grading of new streets, so that the work of 1906-7 consisted largely of repairs and construction of new streets in the village.

The road leading from the Canadian Pacific Railway station to the Canadian Pacific Railway hotel, a distance of one and a half miles, has been newly graded. New culverts have been put in of vitrified sewer pipes to replace the old structures of logs, which had been in use for a number of years and were in such a decayed condition as to be unfit for further use. The bridge leading over the Bow river, 360 feet in length, was newly planked the entire distance, and both the Bow and Spray River bridges have been repainted.

At Laggan, two miles of new road was added to the road leading from Lake Louise to Moraine lake, or the Valley of the Ten Peaks. This road is now completed and in good condition for a distance of nine miles from Lake Louise, and has been very extensively used the entire length during the past season. It has been described by many tourists as one of the most picturesque drives in the whole of the National Park. There is still a gap of about four miles to complete this drive to Moraine lake, which we hope to carry to completion during the next year, provided the funds are available. A portion of the road from the railway station at Laggan to the Chalet

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at Lake Louise was gravelled during the year, but owing to the heavy rainfall and the large amount of traffic on it, it was necessary to do considerable repairs, an addition having been made at the Chalet, necessitating the hauling of the material over this road during the rainy season.

The road in the eastern portion of the park, or what has been described as the Coaching Road, between Calgary and Banff, has received particular attention during the past year. The principal work done was at what is known as 'The Gap,' or the entrance of the mountains, where for a distance of half a mile the road had to be constructed out of the solid rock. Consequently the distance constructed constituted nearly the whole season's work at this point. The most difficult part of this work has been completed, and with a good appropriation next year we hope to have the park portion of the road in good condition.

In Yoho Park, the principal work done was a continuation of the carriage drive up the Yoho valley to Takakaw falls. This road has now been completed for a distance of about seven miles. About two miles were constructed during the present year. Owing to the nature of the ground, it being covered with boulders, a great deal of blasting had to be done, which made progress very slow.

A portion of the Emerald Lake road had to be cribbed, in consequence of erosion by high water in the Kicking Horse river. Considerable work had also to be done on the Ottetail carriage road, caused by washouts during the spring when the snow slides were coming down.

All the roads and bridges in the park have been carefully attended to and are in first-class condition. During the year there have been no delays or accidents reported or complaints made as to the condition of the roads, owing to a careful and frequent inspection.

THE CAVE AND BASIN, AND UPPER HOT SPRINGS.

Notwithstanding the additions that have been made in past years to the cave and basin and the opening of the bath-houses at the upper hot springs, we have found it necessary to make additions to both during the year. Twelve additional dressing rooms have been added to each of these places, making in all fifty-six dressing rooms now in use. This accommodation has proved, during the past year, entirely inadequate, as intending bathers have in some cases been compelled to wait for hours before they could secure dressing accommodation. The question of providing increased bathing accommodation is one which will have to be carefully considered in the near future, as it will necessarily involve considerable expense.

For the month of July last year there were nearly eight thousand baths taken, which goes to show the increasing popularity of these baths. This also shows the absolute necessity of increased bathing facilities. The revenue which is being derived from this source will warrant the government in making a very liberal grant for this purpose. The revenue from baths during the past nine months will show an increase of about 25 per cent over that of any previous year in the history of the park. I would suggest that a competent architect who is familiar with the construction of other bathing health resorts, be sent here to prepare up-to-date plans for a large addition at the upper hot springs, for a building that would be suitable for ten or fifteen years hence, and that a complete bathing establishment be erected at as early a date as possible. A new pool will also be required to be added at the cave and basin. This can be supplied with the surplus water at the cave which now flows down the bank to the river. As the revenue from these sources has increased so rapidly, I feel that the government would be justified in expending a reasonable amount of money in providing additional accommodation for what has always been one of the chief attractions of the park.

I reproduce for ready reference the analysis made by A. McGill, government analyst, of the water from the springs:—

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	Millegrammes per litre.	Grains per gallon.
Chlorine (in chloride)	6.0	0.42
Sulphuric acid (SO)	550.0	38.50
Silica (SiO)	33.0	2.31
Lime (CaO)	355.0	24.85
Magnesia (MgO)	69.5	4.87
Alkalies (expressed in terms of Na ₂ O)	8.9	0.62
Lithium	A decided trace.	
Sulphuretted hydrogen (H ₂ S)	4.3	0.30
Temperature of water	115.5° F.	
Albuminoid nitrogen	None.	None.

MUSEUM.

During the past year the number of visitors who registered at the museum was over eight thousand, besides a great many others who visit it without registering. These visitors, as will be seen by the table of registration, come from almost every part of the globe. A number of additions have been made to the collection during the past year. About 150 varieties of bird specimens have been added, besides several animal specimens. A large amount of work has been done in connection with levelling and clearing the grounds. Rustic seats have been placed at intervals among the trees, and the wisdom of providing this accommodation is evidenced by the large number of people who are seen daily enjoying the cool breezes and genial shade along the Bow river. The museum and grounds form one of the most attractive and interesting spots in the park for visitors, and many are the expressions of admiration heard at the fine collection of specimens in the museum.

THE AVIARY.

All the pheasants have done remarkably well during the past year, and no loss has occurred, notwithstanding the severe weather of last winter. A satisfactory increase has been made by each variety. There are at present eight varieties, including Japanese golden, Japanese copper, Mongolians, English silver, English ringnecks, Prince of Wales, Reeves, Lady Amherst and common. It is also intended to add a complete collection of the grouse family, native to western Canada, arrangements for which have already been made. A new aviary for the accommodation of these birds will be built, as the expense of caring for these is so slight in comparison to the interest which they are to travellers and visitors to the park.

The new eagle cage recently completed is considered one of the finest on the continent, and visitors say that it is superior to anything of its kind in any of the parks of New York or Chicago. The two golden eagles in the cage are very fine specimens of the kind and are a source of attraction to visitors.

Three specimens of wild geese have been secured and are doing well, but so far have failed to increase.

THE FAUNA OF THE PARK.

The diary kept by the caretaker for the nine months shows that no less than 12,000 persons passed through the gates of the animal paddock during that time. This is a greater number than passed through the gates during any previous twelve months. This section of the park is becoming yearly an ever increasing attraction. The only additions made during the year, outside of natural increase, were a pair of raccoons, a pair of lynx, one porcupine and one kit fox. The herd of buffalo now numbers 79, an increase of 18 during the year. They are all in a healthy and thriving condition,

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and there has been no loss during the year. The elk and moose, as will be seen by the table below, have made a very satisfactory increase. In fact, all the animals in the paddock have done particularly well during the year. There has been no loss whatever except among the mule deer, the loss in which was seven, due to the extreme cold and deep snow of last winter, allowing the coyotes to destroy that number. We were, however, successful in poisoning and trapping seven coyotes which had got within the inclosure, and it is hoped that in future no further depredations will be made by these animals. As already pointed out by last year's report, arrangements are being completed by which the transfer of all the caged animals now in the buffalo inclosure will be made to permanent cages constructed of iron and cement, within the museum grounds. These cages are well under construction, and the animals will all be transferred before next winter sets in, when they will receive much better care and attention than in the past, as the sanitary conditions in regard to their cages will be greatly improved by water and sewer connections.

The whole of the fence around the animal inclosure for a distance of three miles has been renewed with new posts during the year, the old posts having become decayed and considered unsafe, after nine years of use. During the year two wolves were donated to the Brandon Agricultural Society.

The total number of animals, with the increase, now in captivity in the park is as follows:—

Buffalo..	79	Increase for year..	18
Moose..	15	" " " " " " " "	3
Elk..	11	" " " " " " " "	3
Mule deer..	7	Decrease " " " " " " " "	7
Persian sheep..	4	Increase " " " " " " " "	0
Angora goats..	6	" " " " " " " "	1
Mountain lions..	2	" " " " " " " "	0
Bears..	3	" " " " " " " "	1
Wolves..	2	" " " " " " " "	0
Coyotes..	3	" " " " " " " "	0
Badgers..	2	" " " " " " " "	0
Foxes..	3	" " " " " " " "	0
Great horned owl..	1	" " " " " " " "	0
Raccoons..	2	" " " " " " " "	0
Lynx..	2	" " " " " " " "	0
Porcupine..	1	" " " " " " " "	0
Total..	143		33

THE FLORA OF THE PARK.

During the past year a large number of botanical students have visited the park and have been greatly attracted by the profusion and variety of the flora found here. There is no place on the continent which offers a greater field for botanical research, as the wild flowers to be found in different parts of the park include almost every known flower to be found in this latitude. Lovers of nature find here an almost endless variety of colour and perfume, which to them is both a pleasure and a delight. The season for flowers is short and commences as soon as the snow disappears in the spring. Change succeeds change with bewildering rapidity, for in a few days you pass through as many climates and floras, ranged one above another, as you would in walking along the low lands to the Arctic ocean, some in dry, breezy situations, others sheltered and kept moist by lakes, streams and wafting of waterful spray, making comfortable homes for plants widely varied.

Even the majestic canyon cliffs, seemingly absolutely flawless for thousands of feet, and necessarily doomed to eternal sterility, are cheered with happy flowers on invisible niches and ledges, wherever the slightest grip for a root can be found, as if nature, like an enthusiastic gardener, could not resist the temptation to plant flowers everywhere. Many interesting ferns are distributed over the park from the foothills to a little above the timber line. Thousands of the most interesting gardens in the park are never seen, for they are small and lie far up in ledges and terraces of the

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sheer canyon walls, wherever a strip of soil however narrow and shallow can rest. The birds, winds and down-washing rains have planted them with all sorts of hardy mountain flowers, and where there is sufficient moisture they flourish in profusion within eight or ten feet of a snow bank. You may see belated ferns unrolling their fronds in September, on ground that has been free from snow only eight or ten days and likely to be covered again within a few weeks. Again, under favourable conditions, Alpine gardens three or four thousand feet higher than the last are in their prime in June, while at a distance of a few hundred yards would be found a heavy avalanche of snow, showing flowery summer on one side and winter on the other. At Lake Louise the *trollius laxus* with its white or pink petals and its delicate green leaves, springs forth in the early spring. At Glacier the beautiful yellow erythranium is seen pushing its way through several inches of snow. The crimson Calypso, the prettiest orchid on earth, may be seen above the pine needles in the forests at Banff in the first week of June, and Lyell's larch, which buds and blooms at an altitude of 8,000 feet during May and June, is one of the most beautiful flowering trees in the world. A few of the other varieties which bloom in the spring are the primulas, anemones, rhododendrons, menziesia, pink garlics and harebells. These are all gone by August, leaving only stray asters and amicas to tell of the parting beauties of the flora of the park.

In the museum at Banff a large and fairly complete collection of the flora has been pressed, named and placed on exhibition, and is of great benefit to the botanical students who every year visit this interesting place.

FISH AND FISH HATCHERY.

Since my last report fishing in the park has attracted a greatly increased number of people to enjoy the sport. I must, however, draw your attention to the fact that the big catches which were common in former years are becoming almost unknown. The only conclusion to arrive at, more especially with regard to the more accessible lakes and streams, is that they are being rapidly fished out, and that it will be necessary in the near future, either to restock many of them or to curtail or even abolish the open season for some time. In 1906 the Fisheries Department for some reason extended the open season, making it from April 1 to October 1, instead of from May 15 to September 15, as formerly. This, in my opinion, was a grave error, especially as it affected the park, as it is a well known fact that fish are more easily caught in early spring before the time of high water than at any other time of the year. During the summer months when the tourists, many of whom have come thousands of miles and in fact some of them from across the ocean with the sole object of fishing, arrive here, they are very much disappointed to find that the streams have been in a measure depleted in the early spring, before their arrival. I would urgently recommend that the open season in the Rocky Mountains park should be very much curtailed rather than extended, and that no person be allowed to fish without first having obtained a license. A small license fee might be collected from non-residents of Canada. A limit should also be placed on the number of fish allowed to be taken by any one person in any one day. These are among the enactments which, as a result of my experience, I think should be made for the proper regulation of trout fishing in the park. I might add that I have already submitted a draft of regulations as stated above to the Commissioner at Ottawa, which, if approved, would render the National Park independent of the general fishery regulations of the country.

In connection with the above I have strongly recommended the establishment of a properly equipped fish hatchery at some one of the many suitable locations to be found within the limits of the park. We would then be in a position to supply not only our own requirements, but those of the provinces of Alberta and Saskatchewan as well. The cost of the building in connection with a moderate sized hatchery would not be very great, the cost of maintenance is comparatively small, one or two

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men being all that would be required to oversee the work, and in this way millions of small fish could be transplanted into the various streams, not only in the park, but in the provinces surrounding it, besides adding one more to the many attractions now existing.

PRESERVATION OF GAME.

I find great difficulty in enforcing the laws in regard to the preservation of game within the park limits, as game is generally killed in the more remote districts, and offenders are careful to see that their actions are unobserved. There is great difficulty in securing evidence regarding unlawful killing other than the possession of the game. Among the offenders against the game laws, the Indians are by far the worst. They come to the National Park at all seasons of the year and slaughter any animal that they may see, without regard to age or sex.

I would recommend that the department should, without delay, instruct all Indian agents in the west to notify the Indians in their charge that they are not permitted to shoot any game of any kind at any time in the Rocky Mountains Park, and that if convicted they would be subject to the maximum penalty allowed by the law. I would also recommend that no further mining or timber licenses be granted in the park, for the reason that I have found by experience that the establishment of large camps of men invariably leads to trapping and snaring, and in fact to almost every possible breach of the laws for the protection of game.

A game warden has been patrolling the park during the year, but found no offenders. The fact of the appointment of such an official having become known has had a most salutary effect, and little, if any, poaching has been done during the year. Owing to the large extent of territory embraced in the Rocky Mountains Park, it is impossible for one man to make anything like a satisfactory patrol, and it is only after information has been received, that hunting parties are already out in the mountains, that we are able to trace their movements. As you may be aware, I have submitted during the past year what I consider would be suitable regulations to have in force in the park in regard to hunting parties. These suggestions include among others that all guides and camp helpers shall pay an annual license, and each be held responsible for the good behaviour of his assistants and of the parties in his charge, and shall have the powers of a game warden to enforce the laws in that respect; the illegal possession of each and every head of game to be a separate offence; the game wardens or persons in whom the proper authority is vested to have the power to search the premises of any person suspected of having game or fish in his possession unlawfully; and also that the game warden shall have power to at once confiscate such game or fish and arrest such person or persons and bring them before the proper authority for dealing with the case; all guns or firearms of any sort carried by persons travelling through the park to be sealed in the proper manner, and such seals not to be broken within the park limits; the head guide in charge of the party to be provided with one extra seal for each gun or firearm and a sealer to be given to the guide; and on return to the park boundary the head guide shall again seal all guns and firearms in his party, such seals to remain until broken by the proper authorities at Banff; the penalty for violation of any of these regulations to be not less than \$20 nor more than \$200 for each and every head of game illegally killed, or to a term of imprisonment of not less than two months nor more than one year; the license of the head guide of any party that illegally shoots or kills game to be cancelled for two years, and he will not be allowed to accompany any of the parties through the park in any capacity for such period of two years.

The adoption of the above regulations would, in my opinion, greatly facilitate the carrying out of the laws and regulations for the preservation of game in the Rocky Mountains Park.

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PREVENTION OF FOREST FIRES.

During the year there was one fire in the month of August near Lake Louise, which destroyed some four or five miles of beautiful young forest, but which we were able to get under control without further damage being done. The establishment of a twice a day patrol along the line of railway from Morley to Laggan during the dry period has had the effect of preventing to a great extent what would otherwise be very serious fires.

THE BANKHEAD MINES.

The mines of the Pacific Coal Company, Limited, at Bankhead in the Rocky Mountains Park have been in steady operation since last year's report, with the exception of about two weeks, during which time the employees laid off, pending an agreement between the coal companies of Alberta and British Columbia and their employees. The tonnage being produced is now more than twice that being taken out at this time last year.

The briquetting plant, which was in course of construction at the time of last year's report, has been working continuously since March 1, and is producing 250 tons of briquettes every twenty-four hours. The demand for briquettes has been far in excess of the company's most sanguine expectations, so that the plant was put on two twelve-hour shifts on May 22, and has been running 24 hours per day since that time. These briquettes have been found to be a very desirable fuel for household use, as well as having given satisfactory results in passenger locomotives, and they are at present being used on the Pacific division of the Canadian Pacific Railway for the purpose. The machinery is now in order for an additional unit, after the installation of which the daily production of briquettes will be 500 tons.

Two additional boilers of 150 horse-power capacity each have been installed during the past year, and another one is now in order, which makes the capacity of the boiler plant 1,350 horse-power.

THE ALPINE CLUB OF CANADA.

The second annual camp of the Alpine Club of Canada was held in Paradise valley, from July 4 to July 11, last, and was a very successful meeting. The following is a description of the club's outing this year:—

The location of the camp was carved from the virgin forest directly at the base of Mount Aberdeen. A mountain torrent, fed by the Horseshoe glacier at the extreme head of the valley, flowed swiftly through the encampment. On the right hand side, directly below the towering battlements and precipices of Mount Temple, were the gentlemen's quarters, the numerous tents being connected by little paths cut through the bush. On the left-hand side of the torrent, along which lay the pony trail, were the ladies' quarters, the official residences, staff headquarters and dining pavilions. Herein might be noticed a distinct difference from last year's assembly. There, all tents were in the open. Here, they were shaded 'y giant spruce and balsam. In all about 45 tents were pitched, those used for sleeping purposes being thickly brushed with balsam boughs.

To the left of the camp rose Mount Aberdeen, height 10,340 feet above sea level, and to the right, Mount Temple, 11,626 feet. Both these mountain masses were used as climbs on which to qualify aspiring graduates for active membership in the club. It will be remembered that to become an active member it is necessary to have made a climb of 10,000 feet above sea level. Aberdeen is the easier and shorter climb, presenting as a most attractive feature a snow slide, or glissade, of over 2,000 feet for the return journey. Temple proved unattractive as a climb, being chiefly a long snow grind. But the view from this great altitude of the highest peak in the vicinity,

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reaching over a hundred miles in all directions, more than compensated for the difficulties and monotony of the way.

In all 150 persons were at the camp; of these 66 graduated for active membership, 50 on Mount Aberdeen, 15 on Mount Temple, and one on Mount Fay (No. 1 of the Ten Peaks). Fully half the number were ladies. A full programme was posted on the bulletin board each day, and many trips over the adjacent mountain passes and to picturesque features in the vicinity were undertaken, as many as nine parties being sent out in one day. From 4 a.m. to 10 a.m. it was a busy time getting the expeditions off, but from then on the camp was deserted until night, when life and merriment were in full swing around the camp fire.

The most attractive item of the official programme was a two-days trip of about twenty miles, traversing four glaciers and crossing five mountain passes. The night was passed at Lake O'Hara, one of the most strikingly picturesque lakes in the entire region, with a setting of snow peaks, rock precipices and wildly tumbling glaciers that rivals, if it does not surpass, the far-famed Lake Louise. This trip was well patronized, but only three ladies attempted it, owing to the very strenuous nature of the work and the difficulties and dangers encountered. It was pronounced by all as well worthy of achievement.

There were visitors to the camp from points in Canada reaching from Prince Edward Island to Vancouver Island, and many points in the colonies and United States were represented. The American Alpine Club, The Appalachian Mountain Club of Boston, and The Mazamas Mountain Club of Portland, Oregon, sent delegates. The Alpine Club's membership now extends to Cape Town, South Africa; to Melbourne, Australia; to Paris, London, Dublin, New York, and many of the leading cities of the United States.

A unique feature of the camp was the first art exhibit. In a tent in the forest at the summit of the range, almost on the very divide, was displayed an exhibition of mountain views that would grace an exhibition of this nature in the most cultured city of the world. There were nine exhibits, one from Toronto, two from Vancouver, one from New York, one from Winnipeg, one from Michel, B.C., one from Banff, and two from Calgary.

A feature of the nightly camp fire was the production of the first issue of *The Alpine Herald*, a little sheet begun in fun and ending in earnest, for it has been decided to publish it in newspaper form in Toronto, and make it available to the public. It showed clearly that wit and intellect go hand in hand with the mountaineering pastime.

Throughout the feeling was most enthusiastic and a desire for hard work shown. There was a snap and eagerness apparent throughout, that was most gratifying and shows clearly that the club has taken root and will grow.

An incidental feature is a very important one, viz., that the people who attend the camp are still moving about through the mountains, spending considerable money in these regions enjoying their holidays.

It means that these people will preach and promulgate the idea among Canadians, that they have in their own country a far better holiday land than can be had anywhere else abroad.

The following letter received from Prof. Charles E. Fay, Principal of Tuft's College, Massachusetts, and also President of the American Alpine Club, will be of interest and will tend to show that the work already done and now being carried on to bring before the notice of the outside world the attractions of the Rocky Mountains. Park in the matter of mountain climbing is being appreciated. It also goes to show the advisability of making accessible many hitherto unexplored portions of the park, which will in many cases outrival any of the hitherto frequented portions of the park.

Prof. Fay has made yearly visits to the park since 1904, and in every visit has found new attractions in this line:—

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'TUFT'S COLLEGE, MASS., December 21, 1906.

'HOWARD DOUGLAS, Esq.,

'Superintendent of the Rocky Mountains Park,

'Banff, Alta.

'DEAR SIR,—I desire to express to you my great gratification at the character of the work of developing the noble National Park of the Dominion of Canada now being carried forward under your supervision.

'As one of the earliest and most frequent visitors to the Canadian Rockies,—my first visit was made in 1890, and I have made thirteen other visits since 1894,—my chance has been unusually good for observing the increase of opportunity for the ordinary tourist to enjoy scenery known in those earlier days only to the pioneer and explorer.

'This is especially true of the regions about Laggan and Field, which as recently as 1900, were practically unknown territory except within a comparatively short radius of the hotels, that as yet accommodate but a small number of tourists. The opening of the Yoho valley and the completion of an excellent trail to Lake O'Hara, and the yet larger enterprise of a carriage road to the wonderful valley of the Ten Peaks now well under way, are notable instances of a care for the higher interests of the travelling public for which it cannot be too grateful.

'As one deeply interested in the extension of the work, I may perhaps be permitted a few suggestions touching possible future improvements.

'I would chiefly urge the desirability of opening a short side trail from the present trail to Lake O'Hara, in order to render accessible another beautiful, yet little known lake, situated directly at the base of the sheer cliffs of Mount Odaray, and for which the name Lake Linda has been adopted by the Geographic Board. It is entirely surrounded by forests and meadowy glades, and is an excellent spot for prolonged camping. From its western shore across the water a magnificent view is afforded of the loftiest peaks of the Bow range, Mounts Victoria, Lefroy, Hungabee, Deltaform and Biddle. Nearer at hand in the north, spring the butting crags of Cathedral Peak and Mount Stephen, while in the west a great amphitheatre is completed by spurs of this latter mountain and Mount Duchesnay. Not far away in this direction lie several other interesting smaller lakes.

'Such a small trail would probably leave the main one at or slightly beyond the bridge which crosses the O'Hara stream, and would seek the easiest way to a crossing to the north side of the branch of Cataract creek, which comes in from the west. The timber is apparently much more open on this side of the stream, and a very easy way may be found nearly all of the distance to where the stream from Lake Linda enters from the south. An easy crossing may here be made, and from this point open glades may be followed for the remaining half mile to the fine camping ground on the south-west shore of the lake. Nothing save to mark the way would be necessary for this portion of the trail. The entire distance from the bridge on the O'Hara stream to Lake Linda is scarcely three miles, of which not over one mile would require much labour to construct.

'A very interesting addition would be another link in the same system of trails by which Lake O'Hara could be reached by a short cut from Lake Linda, passing yet another series of pretty lakelets in an intervening valley. Starting from the camp ground just mentioned, such a trail would pass over the curious morainial mounds on the southern shore and ascend by a grassy slope to the highest point of the wooded ridge reaching out from Mount Odaray. It would descend on the other side, still in the open, by zig-zag down the more precipitous slope to the edge of a glacial lake, which I have seen partly frozen over late in July. A game trail at present skirts its north shore. Lesser lakes are along its outlet near at hand. The trail would climb in the open to the crest of the ridge intervening between this valley and that of Lake O'Hara, and enter the trail joining this latter to Lake McArthur. (It may not be

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amiss to observe that this portion of the existing trail—that is where it crosses this meadow—is much in need of clearer marking.) Pedestrians visiting Lake McArthur from Lake O'Hara can make a direct and easy trip to Lake Linda by way of an interesting pass close under Odaray. Thus a round trip from the camp at Lake Linda, taking in the other two lakes, is even now easily feasible for good walking in a single day. The supplementary trail here advocated should make it a popular excursion.

'The trail first suggested—that from the bridge and Lake Linda—would have an additional value in connection with a fine Alpine trip easily made from Field to which I would like to call your attention. So far as I know it has been made only by my own party in 1903.

'I refer to the crossing of the high pass (about 9,400 feet) between Cathedral Peak and Mount Stephen. Starting from the railway just east of the tunnel, one shortly passes an interesting cascade and comes to a considerable valley-glacier, over which one makes his way and climbs, chiefly over snow, to the pass itself. From here there is a superb view of the entire Yoho valley in one direction, and of the magnificent Mount Goodsir in the other. It well deserves to be better known; and with the construction of the trail suggested, this route would offer a way of approach to Lake O'Hara from Field worthy of mention with the at present matchless excursion to that lake from Lake Louise over Abbot Pass.

'Hoping that year by year new beauties will be rendered accessible by the work under your control, I am, with great respect,

'Yours very truly,

'CHAS. E. FAY.'

HOTEL ACCOMMODATION.

The ever increasing number of visitors to the park is still a puzzle to the hotel managers, as at all points of interest such as Banff, Laggan, Field and Glacier the problem of handling the crowds of travellers taxes the hotel accommodation to the utmost. During the months of July and August many are turned away through lack of accommodation, notwithstanding that large additions are being made yearly. As will be noticed, the register at the Banff Springs Hotel for the nine months ending March 31, was 9,804 people, an increase of 200 over the preceding twelve months, and all the other hotels show a corresponding increase. During the past year an addition of forty rooms was made to the Chalet at Lake Louise; also large additions to the King Edward Hotel, Alberta Hotel and Park Hotel in the village of Banff. There is also a large new hotel of 100 rooms under construction at Banff, which, however, will not be completed in time for this season's travel. Notwithstanding all this additional accommodation, travel appears to increase faster than building operations can be carried on; all of which goes to show the increased popularity of the National Park of Canada.

REVENUE.

The revenue of the park still continues to increase, and for the nine months ending March 31 will show an increase of over 25 per cent over that of the corresponding nine months of the previous year. It is now far in excess of the ordinary current expenses for salaries and maintenance. The constantly increasing popularity of the park and the prospect of still larger revenues which may be derived from different sources, would seem to justify a still larger expenditure in opening up new sources of interest and attraction, necessary to keep pace with growing requirements. A great deal of work has already been accomplished, but there is an enormous amount yet to be done before the people of Canada will be in a position to properly appreciate even a small portion of the splendours of their National Park. I feel confident, from interviews with prominent members of the government and with leading private

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citizens, that neither the government nor the people of Canada would object to a considerably increased expenditure in connection with the development and maintenance of the park. On the contrary, the government would be entitled to the gratitude of the people for the continuation of a policy which hitherto has contributed so largely to the enjoyment of not only our citizens but of visitors from almost every part of the world, who thus have been enabled for the first time to form some idea of the magnitude and magnificence of the Canadian Rockies.

In conclusion it gives me pleasure to acknowledge once again the loyal support which I have received from the employees under me; also the valuable assistance given by the Royal Northwest Mounted Police stationed at different points throughout the park in the maintenance of law and order.

Your obedient servant,

HOWARD DOUGLAS,

Superintendent.

VISITORS.

CANADIAN PACIFIC RAILWAY COMPANY'S HOTEL.

Canada.. . . .	3,357
United States.. . . .	5,726
Bahama Islands.. . . .	1 *
England.. . . .	294
Scotland.. . . .	44
Ireland.. . . .	29
Greenland.. . . .	1
Japan.. . . .	37
Cuba.. . . .	2
India.. . . .	36
Hungary.. . . .	7
Hawaii.. . . .	9
New Zealand.. . . .	44
New South Wales.. . . .	13
Germany.. . . .	26
Denmark.. . . .	3
Australia.. . . .	59
Siam.. . . .	1
China.. . . .	41
Italy.. . . .	7
Switzerland.. . . .	8
Gibraltar.. . . .	3
Egypt.. . . .	4
France.. . . .	16
Norway.. . . .	1
Portugal.. . . .	6
Transvaal.. . . .	11
Jamaica.. . . .	5
Argentine Republic.. . . .	2
Fiji.. . . .	2
Belgium.. . . .	4
Austria.. . . .	2
Russia.. . . .	1
Sweden.. . . .	2
Total.. . . .	9,804

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SANITARIUM HOTEL, BANFF.

Canada.. . . .	3,600
United States.. . . .	802
England.. . . .	167
Scotland.. . . .	78
Ireland.. . . .	13
Australia.. . . .	50
Straits Settlement.. . . .	1
Honolulu.. . . .	6
New Zealand.. . . .	10
Jamaica.. . . .	1
Ceylon.. . . .	1
France.. . . .	6
India.. . . .	12
Germany.. . . .	14
Japan.. . . .	15
Total.. . . .	<u>4,776</u>

ALBERTA HOTEL, BANFF.

*Canada.. . . .	2,576
United States.. . . .	960
England.. . . .	63
Scotland.. . . .	57
Ireland.. . . .	6
New Zealand.. . . .	8
Australia.. . . .	18
South Africa.. . . .	6
China.. . . .	6
India.. . . .	2
Sweden.. . . .	9
Japan.. . . .	5
Russia.. . . .	4
Total.. . . .	<u>3,720</u>

KING EDWARD HOTEL, BANFF.

Canada.. . . .	3,429
United States.. . . .	815
England.. . . .	15
Scotland.. . . .	4
Ireland.. . . .	24
New Zealand.. . . .	12
Australia.. . . .	13
Palestine.. . . .	2
Japan.. . . .	1
Yukon.. . . .	3
Germany.. . . .	1
Sweden.. . . .	1
Barbary Coast.. . . .	1
Total.. . . .	<u>4,321</u>

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GRAND VIEW VILLA, BANFF, ALBERTA.

Canada.. . . .	745
United States.. . . .	105
England.. . . .	19
Germany.. . . .	2
Australia.. . . .	1
New Zealand.. . . .	4
Scotland.. . . .	4
Ireland.. . . .	2
Philippines.. . . .	1
Belgium.. . . .	1
<hr/>	
Total.. . . .	887

PARK HOTEL, BANFF.

Canada.. . . .	1,367
<hr/>	

HOT SPRINGS HYDROPATHIC.

Canada.. . . .	437
United States.. . . .	163
Scotland.. . . .	19
England.. . . .	11
<hr/>	
Total.. . . .	630

SUMMARY.

Canadian Pacific Railway Company Hotel.. . . .	9,804
Sanitarium Hotel.. . . .	4,776
Alberta Hotel.. . . .	3,720
King Edward Hotel.. . . .	4,321
Grand View Villa.. . . .	887
Park Hotel.. . . .	1,367
Hot Springs Hydropathic.. . . .	630
Excursionists not registered.. . . .	1,730
Summer visitors residing in cottages.. . . .	1,500
<hr/>	
Total.. . . .	28,735

CAVE AND BASIN, BANFF.

Canada.. . . .	3,701
Newfoundland.. . . .	2
England.. . . .	196
Scotland.. . . .	83
Ireland.. . . .	8
Australia.. . . .	57
South Africa.. . . .	8
India.. . . .	5
Ceylon.. . . .	2
Hawaiian Islands.. . . .	3

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United States.. . . .	2,506
Mexico.. . . .	2
Honolulu.. . . .	5
Bermuda.. . . .	4
Samoa.. . . .	2
China.. . . .	16
Japan.. . . .	8
France.. . . .	11
Germany.. . . .	16
Russia.. . . .	2
Sweden.. . . .	3
Switzerland.. . . .	5
Total.. . . .	<u>6,645</u>

EMERALD LAKE CHALET, FIELD.

Canada.. . . .	195
United States.. . . .	496
England.. . . .	78
Ireland.. . . .	6
Japan.. . . .	4
India.. . . .	3
Hungary.. . . .	2
South Africa.. . . .	2
Germany.. . . .	4
Australia.. . . .	6
France.. . . .	9
Total.. . . .	<u>805</u>

CANADIAN PACIFIC RAILWAY HOTEL, FIELD, B.C.

Canada.. . . .	948
United States.. . . .	1,302
England.. . . .	120
Ireland.. . . .	7
Scotland.. . . .	15
Wales.. . . .	2
British West Indies.. . . .	2
South Africa.. . . .	3
Australia.. . . .	40
New Zealand.. . . .	10
India.. . . .	1
France.. . . .	4
Germany.. . . .	9
Hawaii.. . . .	2
Russia.. . . .	2
Hungary.. . . .	1
China.. . . .	9
Total.. . . .	<u>2,477</u>

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THE MUSEUM.

Visitors from July 1, 1906, to June 30, 1907, inclusive.

Canada.. . . .	5,725
United States.. . . .	1,843
England.. . . .	439
Scotland.. . . .	126
Australia.. . . .	81
New Zealand.. . . .	50
China.. . . .	28
Italy.. . . .	21
Ireland.. . . .	20
France.. . . .	19
India.. . . .	15
Germany.. . . .	11
Queensland.. . . .	11
New South Wales.. . . .	10
Japan.. . . .	9
Austria.. . . .	8
Newfoundland.. . . .	8
Hawaiian Islands.. . . .	7
West Indies.. . . .	6
Belgium.. . . .	6
Wales.. . . .	6
South Wales.. . . .	4
Switzerland.. . . .	4
Philippines.. . . .	4
Norway.. . . .	3
Denmark.. . . .	3
Africa.. . . .	3
Hungary.. . . .	3
Spain.. . . .	3
Mexico.. . . .	2
Channel Islands.. . . .	2
Isle of Wight.. . . .	2
Indian Territory.. . . .	2
Tasmania.. . . .	2
Russia.. . . .	2
Egypt.. . . .	2
North Wales.. . . .	2
Transvaal.. . . .	2
West Coast Africa.. . . .	2
Dresden.. . . .	2
Sweden.. . . .	1
Federated Malay Straits.. . . .	1
Holland.. . . .	1
Ceylon.. . . .	1
Siam.. . . .	1
Alaska.. . . .	1
Total.. . . .	8,504

7-8 EDWARD VII., A. 1908

The number of visitors was not far behind 1905-6. Many do not register, and others may visit the museum several times after once registering, so that the total will exceed the number given. There have been as many as from 300 to 450 visitors in a day.

A few mammals, plants, fossils, birds have been added to the collection.

I collected many insects which it is hoped will shortly be ready for a well-made cabinet recently received.

Donations and loans have not as yet become very plentiful, but what we have received during the time the museum has been in existence are quite valuable.

What is most needed at present are specimens of the larger four-footed mammals, also a suitable press for what books we have already acquired and that we do require.

I herewith add the usual yearly weather report.

I am, sir,

Your obedient servant,

N. B. SANSON,

Curator and Observer.

H. DOUGLAS, Esq.,

Supt. Rocky Mountains Park.

SESSIONAL PAPER No. 25

METEOROLOGICAL TABLES.

ROCKY MOUNTAINS PARK.

MAXIMUM and Minimum Temperatures and the General State of the Weather between
July 1, 1906, and June 30, 1907.

THERMOMETER READINGS.					
Date.	Maximum.		Minimum.		Weather.
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1906.					
July	1....	64.7	80.7	43.3	44.0 Fair; perfect day
"	2....	76.9	82.1	40.8	41.7 Fair "
"	3....	77.6	83.5	42.9	46.8 Fair "
"	4....	77.3	90.5	45.2	46.9 Fair "
"	5....	85.6	85.5	45.8	46.2 Fair; thunder and lightning; fine sunset; light rain.
"	6....	63.8	89.4	51.2	51.6 Fair; rainbow.
"	7....	81.2	85.1	48.7	50.3 Fair; thunder; rainbow; light rain.
"	8....	68.6	84.5	50.1	50.2 Fair; thunder; rain.
"	9....	71.0	85.0	51.2	52.4 Fair; thunder; lightning.
"	10....	75.9	70.4	57.2	56.9 Cloudy; rain.
"	11....	67.0	79.2	49.0	51.0 Fair.
"	12....	76.0	72.3	50.3	52.3 Fair; Bow River very high; rain.
"	13....	59.4	61.5	48.6	49.2 Cloudy; fine sunset; rain.
"	14....	58.9	78.2	37.8	39.8 Fair.
"	15....	75.5	84.3	42.3	42.6 Fair; perfect day.
"	16....	80.0	83.5	44.2	44.4 Fair; thunder; rain.
"	17....	68.0	80.0	47.2	47.5 Fair; vivid lightning.
"	18....	72.8	78.3	45.2	45.2 Fair.
"	19....	74.7	74.9	48.6	48.6 Fair; rain.
"	20....	67.0	76.9	51.2	51.0 Fair.
"	21....	69.9	78.5	44.2	43.9 Fair.
"	22....	74.1	81.8	43.7	44.5 Cloudy; thunder and lightning.
"	23....	79.2	78.7	47.2	47.0 Fair; swamps dried up.
"	24....	70.7	70.4	43.7	43.7 Cloudy.
"	25....	65.0	79.4	40.1	40.5 Fair; thunder very heavy and very vivid lightning.
"	26....	72.3	62.5	47.5	47.5 Cloudy.
"	27....	61.0	78.9	38.2	38.8 Fair; perfect day.
"	28....	75.1	84.4	40.6	40.2 Fair "
"	29....	79.0	85.0	46.8	51.3 Fair; thunder; lightning; rain.
"	30....	74.5	82.2	44.4	44.1 Fair; thunder and lightning; rain.
"	31....	63.0	72.4	42.5	42.2 Fair; squally wind.
Aug	1....	65.0	71.0	38.7	38.3 Cloudy; Bow River dropping; rain.
"	2....	61.0	57.3	39.6	39.9 Fair.
"	3....	57.8	74.4	30.7	30.2 Fair; frost
"	4....	70.7	76.9	32.1	32.1 Fair "
"	5....	70.0	71.5	47.1	46.8 Cloudy; thunder; fine sunrise and sunset.
"	6....	62.0	79.9	35.2	35.1 Fair; fine sunrise and sunset.
"	7....	75.0	82.3	41.8	41.7 Fair; forest fire; fine sunrise and sunset.
"	8....	75.4	82.2	48.8	49.2 Fair "
"	9....	76.8	79.9	40.0	40.2 Fair "
"	10....	74.8	85.4	44.3	44.2 Fair "
"	11....	80.2	85.5	45.4	44.9 Fair "
"	12....	82.0	70.6	44.3	44.9 Fair; rain; forest fire.
"	13....	67.3	67.9	50.2	53.9 Cloudy; rain "
"	14....	59.3	65.4	50.2	51.4 Cloudy.
"	15....	61.8	59.8	49.2	48.7 Cloudy; rain.
"	16....	57.0	71.3	34.8	34.5 Fair.
"	17....	67.0	72.5	33.9	33.9 Fair; fine sunset.
"	18....	67.7	53.0	47.1	46.2 Cloudy; rain.
"	19....	47.0	60.7	34.4	33.8 Fair; fog; rain.
"	20....	57.9	46.2	43.8	43.3 Cloudy; rain.
"	21....	44.2	40.2	38.2	38.0 Cloudy; fog; rain; snow on mountains.

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MAXIMUM and Minimum Temperatures, &c.—*Continued.*

Date.		THERMOMETER READINGS.				Weather.
		Maximum.		Minimum.		
		6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1906.		°	°	°	°	
Aug.	22....	40.9	54.3	39.7	40.2	Cloudy; rain; fog.
"	23....	52.1	66.0	36.1	36.8	Fair.
"	24....	63.0	64.9	34.9	35.1	Cloudy; rain; thunder and lightning.
"	25....	46.3	63.4	24.0	34.8	Fair; rain.
"	26....	59.8	69.4	39.3	39.2	Fair; smoke.
"	27....	66.0	69.4	42.5	41.9	Fair.
"	28....	63.0	64.4	45.2	46.5	Fair.
"	29....	56.9	72.5	40.5	40.8	Fair.
"	30....	68.0	77.0	39.9	39.5	Fair.
"	31....	71.1	71.4	50.1	49.8	Fair; smoke.
Sept.	1....	66.1	66.4	37.5	35.8	Fair.
"	2....	59.8	68.5	38.2	37.8	Fair.
"	3....	62.2	68.2	34.3	33.3	Fair.
"	4....	62.9	68.2	38.0	37.3	Fair; smoke.
"	5....	64.0	64.8	56.0	55.8	Cloudy; smoke; squally wind.
"	6....	59.4	66.8	55.3	58.8	Cloudy.
"	7....	64.9	67.3	52.4	51.3	Cloudy; light rain.
"	8....	65.2	60.6	54.4	46.0	Cloudy; rain; lightning; thunder.
"	9....	46.3	51.4	35.8	36.2	Fair; light rain.
"	10....	49.0	52.4	29.8	30.1	Fair; ice in places.
"	11....	47.0	53.0	27.4	26.0	Fair.
"	12....	49.0	45.8	24.8	23.5	Cloudy; ice in places.
"	13....	44.7	53.9	37.5	37.3	Cloudy.
"	14....	50.3	55.8	30.8	29.4	Fair; frost.
"	15....	52.0	60.2	28.3	27.4	Fair "
"	16....	54.0	62.3	40.2	41.8	Fair; fine sunrise.
"	17....	59.1	63.8	50.8	50.6	Cloudy; rainbow.
"	18....	59.9	72.2	56.8	58.3	Fair; squally wind.
"	19....	67.0	75.0	50.5	46.9	Fair; perfect day.
"	20....	59.9	58.8	34.8	33.3	Fair; squally wind.
"	21....	51.0	51.9	36.1	35.8	Cloudy.
"	22....	46.0	61.3	40.2	40.2	Fair.
"	23....	54.8	69.6	33.4	31.9	Cloudy; squally wind; thunder and lightning.
"	24....	55.1	52.4	42.0	42.2	Cloudy; rain.
"	25....	45.2	48.8	34.4	35.2	Fair; soft hail.
"	26....	44.3	61.2	30.8	32.7	Fair; fine sunrise.
"	27....	56.0	55.3	28.8	44.0	Cloudy; light rain.
"	28....	48.1	54.6	32.0	30.8	Fair; frost; perfect day.
"	29....	49.1	66.5	25.2	26.9	Fair; frost.
"	30....	61.0	66.2	31.3	31.3	Fair.
Oct.	1....	50.0	60.8	32.2	44.4	Cloudy.
"	2....	49.7	56.8	31.7	31.3	Cloudy.
"	3....	44.8	48.3	35.9	38.7	Cloudy.
"	4....	45.1	45.8	30.9	30.6	Cloudy.
"	5....	43.9	54.4	40.2	42.2	Cloudy.
"	6....	52.4	59.7	45.9	46.7	Cloudy; very squally wind.
"	7....	56.9	55.3	49.2	40.4	Cloudy; squally wind; rain.
"	8....	40.5	46.0	29.0	29.3	Cloudy.
"	9....	44.9	67.2	30.0	30.9	Fair; perfect day; fine sunset.
"	10....	58.0	67.4	37.9	37.2	Fair.
"	11....	61.2	58.0	44.7	43.8	Cloudy; rain.
"	12....	51.8	50.4	42.7	43.6	Cloudy.
"	13....	47.8	54.3	37.7	41.2	Fair; fine sunrise.
"	14....	49.0	48.1	42.0	40.9	Cloudy; fine sunrise.
"	15....	44.1	47.8	28.2	27.3	Cloudy; light rain.
"	16....	38.0	47.0	34.9	35.9	Cloudy; rain.
"	17....	42.2	45.8	36.0	35.9	Cloudy.
"	18....	40.0	44.9	30.1	29.8	Cloudy; rain and snow.
"	19....	39.3	36.6	31.2	30.0	Cloudy; snow remaining on ground.
"	20....	30.2	38.6	23.0	19.1	Fair; ice on still water.

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MAXIMUM and Minimum Temperatures, &c.—*Continued.*

Date.		THERMOMETER READINGS.				Weather.
		Maximum.		Minimum.		
		6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1906.		°	°	°	°	
Oct.	21....	31.7	43.2	16.0	14.7	Fair; perfect day; snow birds; fine sunset.
"	22....	35.2	48.8	20.2	18.8	Fair.
"	23....	36.2	49.5	26.1	26.5	Fair; fine sunrise.
"	24....	45.2	48.4	43.7	38.3	Cloudy; rain; squally wind.
"	25....	39.2	36.3	35.8	32.7	Cloudy; rain and snow.
"	26....	32.9	38.3	28.8	29.2	Fair; snow; fine sunset.
"	27....	34.2	46.2	26.6	34.1	Cloudy.
"	28....	43.1	40.3	35.2	33.9	Fair.
"	29....	35.2	43.3	22.8	24.1	Fair.
"	30....	39.3	47.4	29.1	34.3	Fair.
"	31....	39.0	40.5	29.2	26.6	Fair; first skating.
Nov.	1....	32.3	36.1	27.7	27.2	Fair; geese flying E.
"	2....	31.2	32.0	14.0	14.0	Cloudy.
"	3....	28.0	40.2	24.9	25.4	Cloudy.
"	4....	34.0	28.2	23.2	25.1	Cloudy; light snow.
"	5....	34.4	41.3	25.2	30.8	Cloudy.
"	6....	37.0	39.4	32.0	31.1	Cloudy; light snow.
"	7....	37.7	35.2	28.5	26.2	Fair.
"	8....	29.1	30.1	9.7	5.8	Fair.
"	9....	23.0	35.2	17.6	20.0	Cloudy.
"	10....	38.8	41.6	31.5	30.8	Cloudy; rain and snow.
"	11....	39.5	38.3	26.4	25.9	Cloudy; fine sunrise; squally wind.
"	12....	37.3	40.7	33.3	35.7	Cloudy; rain.
"	13....	41.0	37.9	34.3	34.0	Cloudy; fine sunrise.
"	14....	35.6	37.7	28.8	29.2	Cloudy.
"	15....	35.0	30.8	28.7	19.3	Cloudy; snow.
"	16....	19.7	17.7	8.8	3.6	Fair; sleighing but bad.
"	17....	13.0	15.9	8.0	7.0	Cloudy; fine sunset; skating on river.
"	18....	10.3	10.2	-8.1	-10.4	Fair; good sleighing.
"	19....	9.8	21.2	2.0	1.8	Cloudy.
"	20....	21.3	23.1	10.1	5.8	Fair; English sparrows.
"	21....	19.3	24.7	9.7	10.8	Cloudy; fine sunset.
"	22....	16.7	21.7	-1.8	-0.9	Fair; fine sunrise and sunset.
"	23....	17.2	26.7	12.4	15.4	Fair; squally wind.
"	24....	25.1	32.0	16.7	16.5	Cloudy.
"	25....	25.7	30.3	22.2	22.6	Fair.
"	26....	24.0	23.4	6.7	5.9	Fair.
"	27....	15.0	27.7	7.4	7.9	Fair.
"	28....	21.2	26.1	7.5	5.2	Fair; sleighing bad in places.
"	29....	17.2	22.2	2.2	2.7	Cloudy.
"	30....	19.0	19.7	2.5	1.4	Fair.
Dec.	1....	24.4	29.4	19.0	22.2	Cloudy; ice on river about 6 inches.
"	2....	30.2	33.4	25.2	27.0	Fair; chinooking.
"	3....	45.2	46.6	33.0	29.1	Cloudy "
"	4....	33.0	38.1	11.0	7.3	Fair.
"	5....	7.7	2.8	2.4	-8.7	Cloudy; snow.
"	6....	-2.4	24.0	-9.5	-3.2	Cloudy "
"	7....	21.2	-4.3	-9.0	-12.0	Cloudy; sleighing good; snow.
"	8....	-9.2	1.8	-25.5	-27.0	Fair; aurora.
"	9....	0.8	16.7	-11.2	-5.3	Cloudy.
"	10....	15.3	18.2	5.3	2.8	Fair.
"	11....	32.8	34.4	16.0	28.8	Cloudy; light snow; squally wind
"	12....	29.0	4.2	2.2	-5.1	Cloudy; snow.
"	13....	-5.0	8.3	-19.7	-15.6	Fair.
"	14....	0.5	15.3	-9.4	-8.8	Fair.
"	15....	11.7	17.0	5.0	4.8	Cloudy.
"	16....	16.0	21.2	5.0	5.7	Fair.
"	17....	22.4	27.7	17.2	20.8	Fair; squally wind.
"	18....	34.4	38.3	25.8	30.2	Cloudy.
"	19....	32.2	33.8	25.8	23.0	Fair.

7-8 EDWARD VII., A. 1908

MAXIMUM and Minimum Temperatures, &c.—*Continued.*

THERMOMETER READINGS.					
Date.	Maximum.		Minimum.		Weather.
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1906.	°	°	°	°	
Dec. 20....	29.7	27.7	12.9	14.6	Cloudy.
" 21....	25.1	20.0	8.8	8.2	Cloudy.
" 22....	27.9	40.8	19.0	26.3	Cloudy; squally wind; thaw.
" 23....	41.3	42.5	31.8	31.2	Cloudy.
" 24....	35.2	27.8	21.6	19.8	Cloudy; snow and rain.
" 25....	25.0	20.9	18.5	14.2	Cloudy; snow.
" 26....	17.5	12.6	-11.4	-13.4	Fair; fine sunset.
" 27....	18.8	25.6	12.2	16.8	Cloudy; squally wind.
" 28....	28.0	31.5	21.6	24.8	Cloudy "
" 29....	29.2	28.7	19.1	13.2	Cloudy; snow.
" 30....	13.7	-2.9	-3.3	-8.8	Cloudy; squally wind.
" 31....	-7.8	-9.0	-12.9	-20.1	Fair.
1907.					
Jan. 1...	-20.0	-17.0	-32.3	-32.3	Fair.
" 2....	-23.4	6.7	-28.7	-26.7	Fair.
" 3....	2.0	4.6	-8.3	-5.0	Cloudy; snow.
" 4....	-4.8	-10.1	-16.5	-16.4	Fair.
" 5....	-11.8	-3.8	-24.2	-26.4	Fair.
" 6....	-7.8	-4.0	-19.0	-21.6	Fair.
" 7....	-9.0	5.1	-26.7	-15.0	Fair; fine sunset.
" 8....	-6.0	9.9	-22.4	-16.1	Fair; fine sunrise.
" 9....	8.8	15.3	-1.3	6.8	Fair; fine sunrise and sunset; very squally wind.
" 10....	13.0	18.7	1.8	5.6	Cloudy; snow.
" 11....	18.2	4.5	4.9	-2.5	Cloudy.
" 12....	-2.2	-19.7	-31.1	-37.8	Fair.
" 13....	-28.0	-24.7	-46.2	-47.7	Fair.
" 14....	-30.3	-14.7	-48.2	-48.2	Fair.
" 15....	-13.7	-7.8	-30.8	-31.3	Fair.
" 16....	-18.0	3.9	-23.9	-20.4	Fair.
" 17....	0.8	8.2	-12.4	-11.1	Fair.
" 18....	7.9	10.9	-1.5	-3.4	Cloudy.
" 19....	7.9	-4.0	-21.0	-21.6	Fair.
" 20....	7.6	23.7	-23.6	6.8	Cloudy; squally wind.
" 21....	30.0	40.8	22.3	30.0	Cloudy; chinooking.
" 22....	38.7	43.2	33.5	36.3	Fair "
" 23....	39.7	38.6	33.4	9.9	Cloudy; very squally wind; snow.
" 24....	10.2	6.0	-13.0	-19.5	Fair.
" 25....	-3.0	10.6	-11.9	-13.9	Fair.
" 26....	10.7	7.8	6.6	1.8	Cloudy.
" 27....	2.0	-9.3	-24.2	-30.4	Fair.
" 28....	-18.5	-12.2	-30.7	-18.9	Cloudy.
" 29....	-14.0	4.2	-15.3	-14.3	Cloudy.
" 30....	4.0	-4.4	-14.2	-14.3	Cloudy.
" 31....	15.8	20.9	4.2	-1.3	Cloudy; snow.
Feb. 1....	-1.0	-8.0	-12.2	-14.2	Fair "
" 2....	-14.0	-17.2	-36.0	-38.5	Fair; aurora.
" 3....	-26.2	-16.9	-45.6	-46.3	Fair.
" 4....	-23.0	8.3	-32.2	-28.7	Fair; squally wind.
" 5....	6.0	17.2	-11.3	-1.3	Cloudy "
" 6....	22.3	37.6	12.3	22.8	Cloudy; squally wind; thaw.
" 7....	36.0	36.0	31.1	30.9	Cloudy; snow; thaw
" 8....	36.0	40.1	32.2	32.7	Cloudy "
" 9....	37.8	40.5	26.7	26.7	Fair; aurora; thaw; fine sunset.
" 10....	36.2	36.4	24.9	28.2	Cloudy; squally wind; fine sunrise and sunset.
" 11....	34.0	38.9	20.7	15.7	Fair; squally wind; fine sunset.
" 12....	34.3	44.2	20.5	20.5	Fair; squally wind.
" 13....	37.3	39.0	18.8	15.7	Fair; fine sunset.
" 14....	34.0	42.2	16.0	16.2	Fair; squally wind; fine sunset; aurora.

SESSIONAL PAPER No. 25

MAXIMUM and Minimum Temperatures, &c.—*Continued.*

Date.	THERMOMETER READINGS.				Weather.
	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1907.	°	°	°	°	
Feb. 15...	37.2	45.2	27.2	25.8	Fair; squally wind; fine sunset.
" 16...	42.8	42.1	22.4	19.3	Fair; fine sunset.
" 17...	38.0	37.6	25.9	31.3	Cloudy; squally wind.
" 18...	31.8	36.0	27.3	29.6	Cloudy "
" 19...	32.8	37.2	29.9	30.8	Cloudy "
" 20...	39.0	40.2	32.1	25.7	Cloudy; rain and snow.
" 21...	30.0	42.4	23.4	22.8	Cloudy.
" 22...	38.3	46.3	26.3	26.3	Fair; sleighing bad.
" 23...	42.2	35.4	31.9	29.1	Fair; sleighing good.
" 24...	31.2	34.7	27.8	26.8	Cloudy.
" 25...	33.8	8.3	4.1	2.5	Cloudy.
" 26...	6.8	28.8	-11.5	-9.9	Fair.
" 27...	27.7	32.0	17.6	15.7	Fair.
" 28...	27.0	32.7	-3.3	-4.0	Fair.
Mar. 1...	28.3	30.1	15.7	20.8	Cloudy.
" 2...	30.0	34.2	17.2	12.8	Fair.
" 3...	28.0	33.4	9.5	5.2	Fair; sleighing bad.
" 4...	27.2	33.8	1.2	-0.2	Fair; ice on river about 23 inches.
" 5...	30.8	40.7	3.7	2.8	Fair.
" 6...	36.0	39.0	26.5	24.8	Fair.
" 7...	34.2	39.2	18.6	17.7	Fair.
" 8...	34.0	27.3	19.9	21.2	Cloudy.
" 9...	22.0	34.7	0.7	-1.0	Fair.
" 10...	30.0	32.2	8.4	5.0	Fair; aurora.
" 11...	28.1	22.2	13.5	12.5	Cloudy "
" 12...	15.8	29.8	-6.1	-6.1	Fair; squally wind.
" 13...	25.2	26.3	12.2	13.1	Cloudy.
" 14...	24.2	28.2	14.8	15.7	Cloudy; snow.
" 15...	25.2	28.6	17.9	18.0	Cloudy; squally wind; sleighing good.
" 16...	23.2	25.2	14.2	15.0	Fair.
" 17...	21.5	31.5	-9.8	-10.4	Fair.
" 18...	28.2	29.2	16.4	15.8	Cloudy; snow.
" 19...	27.0	40.6	4.0	6.2	Fair.
" 20...	38.3	38.9	33.9	30.2	Fair.
" 21...	35.8	36.1	24.3	21.1	Fair.
" 22...	31.3	29.9	22.4	21.4	Cloudy; snow.
" 23...	26.2	35.7	12.2	17.9	Cloudy; light snow.
" 24...	29.0	31.0	5.8	6.9	Cloudy; fine sunrise.
" 25...	23.0	21.2	3.2	2.2	Fair.
" 26...	16.0	41.7	-9.9	-10.8	Fair; fine sunrise.
" 27...	37.0	38.1	18.8	26.8	Fair.
" 28...	32.5	25.4	22.4	16.8	Cloudy; snow.
" 29...	21.7	28.6	2.7	2.2	Cloudy.
" 30...	25.2	41.4	2.3	6.0	Cloudy; fine sunrise.
" 31...	39.2	48.2	36.1	38.1	Cloudy; rain with snow; sleighing bad.
April 1...	40.0	38.6	25.8	25.7	Cloudy; ice on river about 22 inches.
" 2...	34.0	41.2	20.0	19.2	Fair; snow.
" 3...	33.0	38.0	21.8	22.4	Cloudy; snow.
" 4...	35.2	45.0	23.8	22.3	Fair.
" 5...	40.8	37.2	29.8	30.1	Cloudy; snow.
" 6...	32.0	37.0	23.2	22.2	Fair.
" 7...	35.6	40.3	21.6	21.3	Fair; junco.
" 8...	35.0	41.3	30.7	30.9	Cloudy; rain and snow.
" 9...	39.1	48.2	34.7	36.2	Cloudy; rain; geese.
" 10...	41.0	36.1	28.6	28.1	Fair; rain; river risen.
" 11...	33.2	42.0	18.2	17.7	Fair; perfect day; juncos.
" 12...	40.0	47.8	16.4	16.0	Fair; perfect day; no sleighing.
" 13...	47.2	54.4	21.0	20.8	Fair.
" 14...	52.0	45.7	32.8	41.7	Cloudy; rain; thunder.
" 15...	45.0	45.7	30.3	29.9	Fair.

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MAXIMUM and Minimum Temperatures, &c.—*Continued.*

Date.	THERMOMETER READINGS.				Weather.
	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
1907.	°	°	°	°	
April 16....	41·8	47·7	26·8	26·8	Cloudy ; rain and snow.
" 17....	33·5	37·5	28·5	27·0	Cloudy.
" 18....	36·8	38·8	16·2	16·6	Cloudy ; river open.
" 19....	35·3	43·3	21·0	20·8	Fair ; perfect day.
" 20....	41·2	56·3	25·8	27·9	Fair ; perfect day ; fine sunset.
" 21....	51·5	52·5	29·7	31·4	Cloudy ; anemones out.
" 22....	47·0	45·0	33·6	33·7	Cloudy ; snow.
" 23....	38·2	33·7	24·7	24·4	Cloudy ; light snow.
" 24....	31·3	41·6	20·8	20·4	Fair ; flicker ; varied thrush.
" 25....	38·2	39·3	24·3	24·3	Cloudy ; snow ; white crowned sparrow ; Bohemian wax-
" 26....	26·0	20·8	14·6	14·7	Cloudy. [wings.
" 27....	17·8	24·4	12·2	12·2	Cloudy.
" 28....	23·2	41·8	3·2	3·7	Fair.
" 29....	39·2	51·0	19·5	19·2	Fair ; perfect day.
" 30....	48·0	50·0	21·2	20·9	Fair ; snow.
May 1....	41·0	42·8	25·8	25·7	Cloudy.
" 2....	37·0	45·6	19·2	20·8	Cloudy.
" 3....	39·4	48·8	21·1	21·2	Fair.
" 4....	48·0	50·2	23·0	24·0	Cloudy.
" 5....	49·0	42·0	27·8	30·0	Cloudy ; rain and snow.
" 6....	36·5	54·8	25·5	21·0	Cloudy.
" 7....	53·0	62·1	29·0	50·5	Fair.
" 8....	55·5	65·0	28·5	32·2	Fair.
" 9....	42·2	48·0	29·5	29·0	Cloudy ; snow.
" 10....	35·2	57·6	27·2	29·0	Cloudy ; rain and snow.
" 11....	47·0	52·3	34·5	35·8	Fair.
" 12....	46·7	48·9	26·0	27·0	Cloudy ; catkins on poplars ; light rain.
" 13....	41·8	55·9	31·2	32·0	Cloudy ; swallows ; frogs piping.
" 14....	53·7	63·5	33·2	38·8	Cloudy.
" 15....	58·3	60·9	49·8	51·0	Cloudy ; light rain ; river rising.
" 16....	51·0	55·3	39·2	39·2	Cloudy ; butterflies.
" 17....	51·8	55·3	36·8	37·1	Fair ; light rain.
" 18....	52·4	52·6	38·7	39·9	Cloudy ; Audubon's warbler.
" 19....	51·0	40·2	39·4	35·3	Cloudy ; rain and snow ; juncos building.
" 20....	36·5	41·4	33·0	32·8	Cloudy ; rain and snow.
" 21....	38·8	43·4	30·2	30·2	Cloudy ; rain and snow ; tanagers.
" 22....	39·0	39·2	32·5	33·3	Cloudy.
" 23....	37·7	44·0	33·0	33·7	Cloudy ; light rain and snow ; fly catchers.
" 24....	41·5	50·3	28·4	31·0	Cloudy.
" 25....	49·2	55·0	29·7	31·8	Cloudy ; chipping sparrows.
" 26....	52·0	60·0	31·2	32·5	Cloudy.
" 27....	56·2	67·4	32·8	32·9	Fair.
" 28....	61·2	64·3	32·2	35·8	Fair.
" 29....	59·7	65·5	34·1	34·4	Cloudy ; arctostaphylos uva-ursi in flower.
" 30....	60·0	65·4	36·9	38·2	Cloudy ; populus tremuloides leafing.
" 31....	59·1	71·4	37·3	37·8	Cloudy ; light rain.
June. 1....	54·9	56·4	40·6	41·4	Cloudy ; light rain ; robins hatching.
" 2....	52·0	53·1	28·1	29·4	Fair ; thaspium cordata in flower.
" 3....	50·2	58·9	33·4	34·8	Cloudy ; river high and muddy.
" 4....	54·8	65·1	29·1	29·6	Fair ; frost.
" 5....	59·8	65·5	40·8	44·9	Cloudy ; light rain.
" 6....	60·0	66·8	34·2	37·0	Fair.
" 7....	62·0	43·6	36·2	39·7	Cloudy ; rain.
" 8....	43·8	57·5	40·2	40·3	Cloudy "
" 9....	53·8	60·2	36·8	43·0	Cloudy.
" 10....	51·9	56·4	37·2	39·4	Cloudy.
" 11....	52·0	60·1	34·8	35·0	Cloudy ; brown bats
" 12....	60·0	65·2	45·0	44·8	Cloudy ; rain ; thunder.
" 13....	51·3	51·9	44·8	46·5	Cloudy ; rain.
" 14....	47·0	54·9	40·6	41·2	Cloudy.

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MAXIMUM and Minimum Temperatures, &c.—*Concluded.*

THERMOMETER READINGS.					Weather.
Date.	Maximum.		Minimum.		
	6 a.m.	6 p.m.	6 a.m.	6 p.m.	
	°	°	°	°	
1907.					
June 15....	54·8	66·5	36·7	41·2	Fair; rain.
" 16....	57·0	58·6	42·8	43·4	Cloudy.
" 17....	56·8	68·1	40·5	43·2	Fair.
" 18....	63·0	71·0	34·8	36·3	Fair; many flowers in bloom.
" 19....	66·0	71·0	39·2	39·7	Fair.
" 20....	64·2	51·0	41·8	40·2	Cloudy; rain.
" 21....	44·3	49·8	34·4	35·0	Cloudy "
" 22....	46·0	53·0	38·3	38·3	Cloudy.
" 23....	52·0	69·6	30·3	32·3	Fair.
" 24....	66·0	73·3	45·9	47·5	Fair; beautiful day.
" 25....	70·8	81·4	39·1	39·4	Fair; perfect day; river very high.
" 26....	76·3	81·9	43·2	43·7	Fair.
" 27....	73·3	75·3	50·9	52·0	Cloudy; thunder; light rain.
" 28....	60·2	65·4	44·7	45·1	Cloudy; rain.
" 29....	54·0	59·3	42·0	38·0	Cloudy "
" 30....	49·0	58·4	43·8	44·0	Cloudy "

PART VII
YUKON TERRITORY

YUKON TERRITORY.

No. 1.

REPORT OF THE ACTING COMMISSIONER.

Dawson, Y.T., May 8, 1907.

The Hon. FRANK OLIVER,
Minister of the Interior,
Ottawa, Ont.

SIR,—I have the honour to submit the report of the Yukon Territory for the nine months ending March 31, 1907.

The production of gold in the Territory, as taken from the official returns, for the nine months ending March 31, 1907, was 220,319.40 ounces; at \$15 to the ounce, which is the valuation fixed for royalty purposes, the value would be \$3,304,791.05. This, however, is below the actual value, but must be used for purposes of comparison. For the last nine months the gold production has been less in proportion than during any similar period since 1898. This is due to the fact that nearly all the claims on Bonanza, Eldorado and Hunker creeks have been worked to such an extent by comparatively primitive methods, that it is no longer profitable to continue working them except by the introduction of a water system and the installation of dredges. A vast number of the claims on these creeks, and on the hillsides adjoining, have been acquired by purchase by the Yukon Consolidated Gold Fields Company.

DREDGING.

This company have installed three large dredges on lower Bonanza, and will have them in operation during the summer season of 1907. They are also constructing enormous ditches and flumes for the purpose of bringing about 5,000 miner's inches of water from the Twelvemile river, a tributary of the Yukon, to the gold fields of Bonanza and Hunker. The proposed work will necessitate the construction of ditches and flumes some fifty miles in length. They have also installed on the Little Twelvemile river, a power plant, to be operated by gravity water, which will provide by electricity the power to operate the dredges on Bonanza. This will enable the company to operate large tracts of ground, which are not sufficiently high grade to be worked profitably by individual miners. The company are also constructing a large dam at No. 57 above Discovery on Bonanza creek; which, when completed, will store 350,000,000 gallons of water. The difficulty in the past has been that the snow melts on the hills during the latter part of April and early in May, and there is a surplus of water for a few weeks, but by June 1, generally, there is not sufficient for hydraulic work on the hills. The construction of this dam will conserve the water for a long period, and enable work to be carried on during the dry season, usually June, July and August. The magnitude of the work of this company can hardly be overestimated, and when they have their ditch constructed and in full operation, the gold produced will be enormously increased, although I do not look forward to this result before the season of 1909.

The operations of the Canadian Klondyke Mining Company on Bear creek, where a large dredge has been at work for the last two seasons, have demonstrated that mining by this method can be successfully carried on.

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Bonanza Basin Gold Dredging Company operated a dredge at the mouth of the Klondyke river, with such satisfactory results that they intend, I understand, installing another one early this season.

The Lewes River Dredging Company, which has operated on Bonanza for the past five years, was very successful and will continue to work.

The Ogilvie dredge was engaged during the summer months at work on the submerged bed of the Klondyke river near its mouth. Arrangements have been made to transport this dredge to some claims on Indian river, where it will work during the summer of 1907.

The Fortymile Dredging Company, which installed a dredge on that river late in the season, will begin work as soon as the ice has gone.

The practicability of dredging for gold will be thoroughly demonstrated during the season of 1907, and if successful, in view of the conditions of the frozen ground, then we may expect a tremendous development along these lines.

INDIVIDUAL MINING.

Considerable individual mining has been carried on at Granville, Quartz, portions of Dominion and Hunker, during the present winter with, it is believed, considerable success. It was felt that every effort should be made to assist and encourage the opening up of new creeks for the individual miner, and the local government expended a considerable sum in the purchase of two Cameron pumps and a boiler to enable the miners of Duncan creek, in the Stewart River district, to sink to bed-rock and cross-cut the creek. It had been found that the water could not be successfully handled except by powerful pumps. The work this season was not altogether satisfactory, and it will require another winter's work to demonstrate the possibilities of this creek. The claim owners who were engaged in doing the representation work on one claim, are disappointed but by no means discouraged, and it is thought that next winter will thoroughly decide the value of this creek.

Considerable work was done in placer mining in the Salmon River district, notably on Livingstone creek, during the last season, and prospecting and mining on a smaller scale in the Kluane district. There has been great activity in the southern end of the Territory in quartz and copper. Many properties have been bonded, and it is confidently expected that considerable capital will be introduced and the enormous resources of this portion of the Territory thoroughly developed.

YUKON PLACER MINING ACT.

The Yukon Placer Mining Act has been in operation a sufficient length of time to enable us to appreciate the value of the present code. There may be occasion for some amendments and modifications, and at the next session of the Yukon Council the matter will be thoroughly gone into, and recommendations made that will tend to remove any cause for friction, and will make the Act as workable as possible, both in the interests of the individual miner and of the large companies now investing so heavily in the Territory.

YUKON COUNCIL.

The Yukon Council met on July 5, and prorogued on July 18. Fourteen ordinances were passed in connection with the local administration, and other necessary business transacted. The revenue of the Territory for the nine months ending March 31, was \$336,279.22, and the expenditure \$309,234.79.

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SCHOOLS.

The school system has been maintained in the same high state of efficiency as in the past, and has always given the greatest satisfaction to the people of the Territory.

ADMINISTRATION OF JUSTICE.

Good order and the absence of crime have marked the nine months just closed, due to the splendid service of the Royal Northwest Mounted Police and the prompt and efficient administration of justice.

GENERAL.

There is a feeling of optimism throughout the Territory, based on the splendid outlook for the future, which I feel cannot fail to be fully realized.

Reports are forwarded herewith from the Comptroller, Gold Commissioner, Assistant Gold Commissioner, Crown Timber and Land Agent and Director of Surveys.

In conclusion, I desire to thank the officials connected with the administration for their very efficient and painstaking service rendered, as in the past, with the greatest diligence and courtesy.

I have the honour to be, sir,

Your obedient servant,

J. T. LITHGOW,

Acting Commissioner.

No. 2.

REPORT OF THE GOLD COMMISSIONER.

DAWSON, Y.T., April 19, 1907.

J. T. LITHGOW, Esq.,

Acting Commissioner of the Yukon Territory,

Dawson, Y.T.

SIR,—During the nine months ending March 31, 1907, forty-seven protests have been issued by the clerk of the Gold Commissioner's Court.

This is a slight increase over the previous year, in which fifty-three protests were issued.

The increase is due in the first place to the large number of locations recently made in outlying creeks with a view to joining groups of claims together for dredging purposes, the general opinion prevailing that the creeks formerly staked and found not of sufficient value to work under the ordinary placer mining methods, will carry sufficient gold to work profitably if worked by a dredge. Secondly, owing to the changes in the Placer Mining Code from the mining regulations in force prior to August 1, last, a number of new questions have arisen for consideration that are not settled by the cases heard under the old regulations.

Only one case has been heard since August 1, last, under section 60 of the Placer Mining Code, and the result has been unsatisfactory. In the first place, no provision

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has been made in the Act for any procedure for hearing a dispute under this section; and secondly, there is no provision for enforcing a judgment given by the arbitrators; and thirdly, the arbitrators being inexperienced in hearing disputes, do not take proper notes of the evidence, and the result is that the record is in such shape that it is impossible for either party to appeal if they desire to do so. In the case that was heard the arbitrators were appointed and the parties appeared before them, but they did not take down notes of the evidence, and after they gave their decision it was found there was no means of enforcing the judgment, and the whole matter remained a nullity, as the parties who thought they were not properly treated would not adhere to the arbitrator's decision, and as far as I can learn, nothing further has been done in the matter. Considerable complaint was made at the same time over the costs of the arbitrators.

To my mind, the settling of disputes under this section is costly, cumbersome and unsatisfactory.

I have the honour to be, sir,

Your obedient servant,

E. A. SENKLER,

Gold Commissioner.

No. 3.

REPORT OF THE ASSISTANT GOLD COMMISSIONER.

DAWSON, Y.T., April 29, 1907.

The Acting Commissioner, Yukon Territory,
Dawson, Y.T.

SIR,—I have the honour to submit herewith the financial report of the Gold Commissioner's office, at Dawson, for the period extending from July 1, last, to March 31, last, which embodies the revenues collected at this office from mining dues during the said period, and also the revenues received at this office during the said period from the offices of the Mining Recorders for the Duncan and Sixtymile mining districts of the Yukon Territory.

The statement in question shows that the total receipts of mining dues amount to \$105,048.30, which is considerably in excess of the receipts for the corresponding period of the fiscal year ending June 30, 1906.

The work of this office has been increasing during the period of nine months ending on the 31st ultimo, and with the reduced staff, it has been at times impossible to keep up the work, especially during the summer months of 1906.

The Yukon Placer Mining Act of 1906, which came in force on August 1, 1906, has brought about an increase of work in connection with the provisions regarding the enlargement of the size of claims; and also regarding the grouping of claims. On the other hand, the coming into force of the said Act has done away with the necessity of certificates of work and free miner's certificates.

The returns of the Mining Recorder for the Duncan mining district have kept up about the same as during the previous year, and those of the Mining Recorder for the Sixtymile mining district have been about the same as they were prior to the abolition of the said office on January 31, 1905, for the corresponding months.

The returns of the offices of the Assistant Gold Commissioner at Whitehorse, and of the Mining Recorders for the Kluane mining district and the Conrad mining

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district have been forwarded to the Department of the Interior direct from Whitehorse during the period herein above-mentioned, and, therefore, there is no occasion for me to make any other reference than this to the said returns.

During the said period of nine months ending March 31, last, the following Interior, viz.:—

1. Lease No. 38, issued on March 17, 1903, in favour of Mr. Andrew W. McConnell, covering a location situated on the right limit of the base-line of Indian river, in the Dawson mining district, two miles in length by one mile in width, cancelled on October 15, last.

2. Lease No. 43, issued on November 5, 1902, in favour of the Klondike Consolidated Gold Fields, Limited, of London, England, covering a location situated on the right limit of the Stewart river, and having a length of about five miles, more or less, commencing at a point about five and three-quarter miles below the McQuestion river, and extending thence down stream the above-mentioned length, cancelled on March 1, last.

No hydraulic mining leases were issued by the Department of the Interior during the said period.

I have the honour to be, sir,

Your obedient servant,

F. X. GOSSELIN,

Assistant Gold Commissioner.

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RECAPITU

FINANCIAL STATEMENT of the Gold Commissioner's

	Free Miner's Certificates.	Placer Grants.	Renewals.	Relocations.	Placer— Registered Documents.	Placer— Certificates of Partnership.	Placer— Certificates of Work.	Abstracts.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Dawson.....	10,402 75	18,270 00	38,645 00	9,160 00	8,886 00	254 00	1,378 00	74 75
Clear Creek.....	33 50	.....	30 00	40 00	17 00	4 00	6 00	....
Duncan.....	476 25	230 00	4,270 00	720 00	537 00	44 00	126 00	.....
Sixtymite ..	86 75	1,130 00	1,170 00	280 00	451 50	8 00	46 00	.. .
Advance Deposit
	10,999 25	19,630 00	44,115 00	10,200 00	9,891 50	310 00	1,556 00	74 75

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LATION.

Office for the Nine Months ending March 31, 1907.

Amended Applications.	Water Grants.	Hydraulics.	Quartz Records.	Quartz— Registered Documents.	Quartz— Certificates of Work.	Quartz— Certificates of Partnership.	Quartz— Licen of Assessments.	Quartz— Certificates of Improvement.	Quartz— Acreage.	Advance Deposit.	Grand Total.
\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
30 00	1,130 00	1,764 50	1,125 00	387 50	467 50	35 00	100 00	60 00	1,254 32	.....
.....	10 00	.....	.....	.....	.....	.....	.....	.....	.....	.....
.....	
.....	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,907 98	
30 00	1,140 00	1,764 50	1,125 00	387 50	467 50	35 00	100 00	60 00	1,254 32	1,907 98	105,048 30

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COMPARATIVE STATEMENTS.

RETURNS, Gold Commissioner's Office.

	Year ending June 30, 1906.	Nine months ending March 31, 1907.	Increase, 1907.	Decrease, 1907.	Net Decrease.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Free miner's certificates.....	25,578 34	10,999 25	.....	14,579 09	
Placer grants.. ..	7,515 00	19,630 00	12,115 00	.....
Renewals.	46,710 00	44,115 00	.....	2,595 00	
Relocations	8,940 00	10,200 00	1,260 00	.....
Registered documents-placer.....	7,149 50	9,891 50	2,742 00	.....
Certificate of partnership	586 00	310 00	.....	276 00	
" work.....	9,396 00	1,556 00	.....	7,840 00	
Abstracts ...	40 50	74 75	34 25	.....
Amended applications.. ..	5 00	30 00	25 00	.....
Water grants	905 00	1,140 00	235 00	.....
Hydraulics.....	6,318 19	1,764 50	.....	4,553 69	
Quartz records	2,265 00	1,125 00	.....	1,140 00	
" registering documents.....	815 75	387 50	.....	428 25	
" certificate of work.....	985 00	467 50	.....	517 50	
" " partnership.....	128 00	35 00	.....	93 00	
" lien of assessment.....	409 00	100 00	.....	309 00	
" certificate of improvement.. ..	22 50	60 00	37 50	.....
" acreage.....	705 50	1,254 32	548 82	.....
Advance deposit.....	1,922 98	1,907 98	15 00	
No. 1 Hester.....	175 00	175 00	
	120,563 26	105,048 30	16,997 57	32,512 53	15,514 96

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INSTRUMENTS Issued during the Fiscal Nine months ending March 31, 1907.

	Free Miner's Certificates.	Placer Grants.	Renewals.	Relocations.	Placer— Registered Documents.	Placer— Certificates of Partnership.	Placer— Certificates of Work.	Abstracts.	Amended Applications.	Water Grants.	Hydraulics.	Quartz Records.	Quartz— Registered Documents.	Quartz— Certificates of Work.	Quartz— Certificates of Partnership.	Quartz— Lien of Assessment.	Quartz— Certificates of Improvement.	Quartz Acreage.	
Dawson..	1,747	1,827	2,893	916	3,207	104	712	5	6	42	3	213	139	180	14	1	24	24	(June only.)
Clear Creek.	8	....	3	4	5	2	3	....	....	1	....	....	....	....	....	....	....	....	....
Duncan.....	100	23	330	72	248	22	93	2	....	....	....	....	....	....	....	....	....	....	....
Sixtymile.....	14	113	83	28	161	4	23
Totals..	1,869	1,963	3,309	1,620	3,621	132	831	7	6	43	3	213	139	180	14	1	24	24	

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FINANCIAL STATEMENT of the Gold Commissioner's Office from July 1, 1906, to
March 31, 1907.

	Amount.	Totals.
	\$ cts.	\$ cts.
<i>Receipts.</i>		
To Free Miner's Certificates.....		10,402 75
<i>Placer.</i>		
To Grants.....	18,270 00	
Renewals.....	38,645 00	
Relocations.....	9,160 00	
Registered Documents.....	8,886 00	
Certificates of Partnership.....	254 00	
" Work.....	1,378 00	
Abstracts.....	74 75	
Amended Applications.....	30 00	76,697 75
<i>Quartz.</i>		
To Records.....	1,125 00	
Certificates of Work.....	467 50	
" Partnership.....	35 00	
Registered Documents.....	387 50	
Lieu of Assessment.....	100 00	
Certificate of Improvements.....	60 00	
Crown Grants Acreage.....	1,254 32	3,429 32
<i>Sundry Accounts.</i>		
To Water Grants.....	1,130 00	
Advance Deposit Account.....	1,907 98	
Hydraulics.....	1,764 50	4,802 48
<i>Clear Creek.</i>		
To Free Miner's Certificates.....	33 50	
Relocations.....	40 00	
Renewals.....	30 00	
Registered Documents—Placer.....	17 60	
Certificates of Work.....	6 00	
" Partnership.....	4 00	
Water Grants.....	10 00	140 50
<i>Duncan.</i>		
To Free Miner's Certificates.....	476 25	
Placer Grants.....	230 00	
Renewals.....	4,270 00	
Relocations.....	720 00	
Certificates of Work—Placer.....	126 00	
" Partnership.....	44 00	
Registered Documents.....	537 00	6,403 25
<i>Sixtymile.</i>		
To Free Miner's Certificates.....	86 75	
Placer Grants.....	1,130 00	
Relocations.....	280 00	
Renewals.....	1,170 00	
Certificate of Work—Placer.....	46 00	
Registered Documents.....	451 50	
Certificates of Partnership—Placer.....	8 00	3,172 25
<i>Disbursements.</i>		105,048 30
By Receiver General.....	103,016 07	
Gold Commissioner's Suspense Account.....	109 25	
Balance Account.....	1,922 98	105,048 30

Certified true and correct.

F. A. H. FYSH,
Accountant.

No. 4.

REPORT OF THE COMPTROLLER.

Dawson, Y.T., April 10, 1907.

J. T. LITHGOW, Esq.,
Acting Commissioner of the Yukon Territory,
Dawson, Y.T.

SIR,—I have the honour to submit my report for the fiscal nine months ending March 31, 1907.

The expenditure under the vote 'Administration of the Yukon' through the Department of the Interior, disbursed through my office, was \$124,299; statements, with vouchers, being forwarded to the department at the end of each month.

The local revenues and expenditures of the Yukon Territory for this period were: revenue, \$336,279.22; expenditure, \$309,234.79, administered through my office; quarterly statements, with vouchers, being sent to the Auditor General as required by order in council. I attach a copy of the balance sheet on March 31, 1907.

It was not considered advisable to change the fiscal year in the management of the local affairs of the Yukon Territory, as it is much more convenient to hold meetings of the Yukon Council during the month of July, or August at the latest, when the business of the previous fiscal year can be wound up and presented to the council; consequently there is a difference between the Dominion fiscal year ending March 31, and the local fiscal year ending June 30, as formerly, of three months.

The disbursement on account of the Department of Justice was \$20,859.27, for services in connection with this Territory, monthly statements being forwarded, with vouchers.

The expenditure on account of the Department of Indian Affairs, for the relief of sick and destitute Indians, &c., was \$2,496.39, and for schools, \$2,250.

The management of the expenditure of the Department of Public Works 'buildings' has, as heretofore, been vested in the Superintendent of Public Works and myself; the expenditure was \$60,696.56.

The royalty collected in the Territory for the nine months was \$82,622.42,—Dawson, \$80,530.38, and Whitehorse, \$2,092.04. There was nothing collected at Fortymile.

The receipts from free certificates issued to exporters of gold from Alaska were \$215.50.

The revenue from these sources was forwarded to the credit of the Receiver General, drafts being sent to the department weekly, and statements monthly.

The revenue from the sale of the Yukon Territorial Court Law stamps was \$3,065.10, from Mining Court stamps, \$342.75; drafts and statements being sent to the Department of Inland Revenue.

Monthly statements of the revenue received in the offices of the Gold Commissioner and Crown Timber and Land Agent have been checked each month as formerly, and the returns forwarded to the Department of the Interior. The suspense account in the Gold Commissioner's office has been checked and the cheques countersigned in payment of withdrawals.

The management of the affairs of the City of Dawson has been vested in my office. A copy of the balance sheet on March 31 is attached hereto.

Since January 1, the services of the Assistant Tax Collector have been dispensed with, the city office having been transferred to my office.

I have the honour to be, sir,

Your obedient servant,

G. I. MacLEAN,

Acting Comptroller.

No. 5.

REPORT OF CROWN TIMBER AND LAND AGENT, DAWSON.

DAWSON, Y.T., May 1, 1907.

J. T. LITHGOW, Esq.,
Acting Commissioner of the Yukon Territory,
Dawson, Y.T.

SIR,—I have the honour to submit my report for the nine months ending March 31, 1907, attached to which you will find

Statement of revenue in the Timber Branch,
Statement of revenue in the Lands Branch,
Statement of Timber and Hay Permits issued.

The revenue has increased, over the same period of last year, in the Timber Branch \$1,129.07; in the Lands Branch, \$232.49,—\$1,361.56.

During the above period \$1,881.03 was paid in on account of the purchase of Dominion lands, \$1,534.31 on account of coal lands and survey fees therefor, and \$105.15 on account of the purchase of town lots.

There is not much demand for Dominion lands, and the availability of these will hereafter be taken advantage of only by those whose vocation makes their residence on the land a necessity, the cultivating of the land being a profitable side issue. The farms already in cultivation in the vicinity of Dawson are quite capable of supplying the present market for products of agriculture. Chicken raising as an industry has developed considerably of late years. Ranch eggs sell at \$3 a dozen in the winter and \$2 in the summer. The first crops of light vegetables, such as lettuce, radishes and onions, are raised in greenhouses, and are usually on the market by about Easter. A number of farms along the Klondike river last season suffered as a result of the high water carrying and depositing a heavy sediment over acres which had been seeded, and again, later, it was found that worms and insects had invaded entire crops. In view of these difficulties and the fact that miles of the Klondike will soon be dredged for gold, the Klondike is being abandoned by the farmer. The best farming locations in the neighbourhood of Dawson are directly across the river, at Sunnysdale and West Dawson, where the ground is high.

As the figures show, the sale of coal lands figures largely in the revenue. There is a boom in coal lands and a large revenue will be derived from this source during the current year. Coal mines are now being worked on Coal creek, below Fortymile, at Five Fingers, at Tantalus and at Tantalus Butte, at which latter place Mr. C. E. Miller, the discoverer, claims to have the best coal yet found in the Yukon Territory. Mr. Miller also discovered the Five Fingers mine and the Tantalus mine. All the steamers on the Dawson-Whitehorse run will consume coal this season, with the exception of the three new boats to be operated by the White Pass & Yukon Route, which also will burn coal eventually. Thousands of tons of coal will be placed on the market this season.

Homestead regulations were adopted by order in council dated July 23, 1906, which came into force on January 2, last, but owing to the fact that we have only now received advice to this latter effect, the several applications made to this office for permission to homestead were not dealt with.

There are three saw-mills operating in Dawson district at the present time, all of which are located in Dawson and all are run by steam-power. In addition to these there is a mill on the Twelvemile river, operated by the Yukon Consolidated Gold Fields Company, at which they manufacture the lumber required by them for mining purposes. From this the department receives no revenue.

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The total sales of the three mills during the nine months are as follows: 1,624,689 feet of lumber, 44,944 railway ties, 602½ cords of wood.

The average price now obtained for all kinds of lumber is \$40 per thousand feet B.M.

The new system of issuing permits for the cutting of saw-logs seems to work satisfactorily. Woodmen are enabled to cut small patches of logs which they find near their wood camps, and thus timber is saved which would otherwise be left or cut up into cordwood. The timber berths now in existence are getting to be pretty well denuded of timber.

Wood for use on steamboats cannot be got less than a distance of two miles from the Yukon, and the necessity of going further back is opportunely relieved by the advent of coal. Wood is getting to be very scarce at a distance from Dawson which would pay, and in the near future wood will likely be entirely displaced by coal for fuel purposes. I believe there will be sufficient coal mined this season to operate all the steamers, as well as supplying Dawson with fuel.

A great portion of the Dawson waterfront was relinquished by the lessees last year, but owing to the large shipments of coal which are to be made to Dawson this summer and in future, nearly all of that abandoned has been taken up for the purpose of erecting coal docks thereon. No less than 750 feet of frontage has been applied for, for this purpose, whilst in Dawson and Klondike City 550 feet had previously been taken up and put to the same use.

As you are aware, this office was placed in my charge last August, thus leaving me in the dual capacity of Assistant Gold Commissioner and Crown Timber and Land Agent. This was done by the Commissioner, under instructions from the Minister of the Interior. Although there is a considerable amount of work in connection with the administration of this office, all the clerical work, accounting and correspondence has been attended to by one clerk, Mr. W. F. Povah, since last August, and the inspection work has been done by one inspector. The staff has been steadily decreased from a total of seven to one clerk in the office, and one timber inspector, under my supervision, creating a saving to the department of over one thousand dollars per month.

Your obedient servant,

F. X. GOSSELIN,

Crown Timber and Land Agent.

CROWN TIMBER BRANCH.

Date.	Royalty.	Timber Permits.	Seizures.	Hay Permits.	Coal Royalty.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1906.						
July.....	493 86	881 30	54 50	105 00		1,534 66
August.....	1,031 94	693 93				1,725 87
September.....	2,167 47	1,348 84	44 25		351 85	3,912 41
October.....	1,958 85	1,910 75	248 00			4,117 60
November.....	162 32	1,318 00	47 00		165 49	1,692 82
December.....	160 42	758 75	6 50			925 67
1907.						
January.....	277 57	61 25	68 50			407 32
February.....	247 37	290 00				537 37
March.....	750 84	237 00	26 00			1,063 84
	7,250 64	7,549 82	494 75	105 00	517 34	15,917 55

F. X. GOSSELIN,

Crown Timber and Land Agent.

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DOMINION LANDS BRANCH.

Date.	General Sales.	Rentals.	Registration Fees.	Survey Fees.	Total.
1906.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
July.....	189 5		2 00		191 59
August.....	1,344 81	8 25	2 00		1,355 06
September.....	20 00	52 66			72 66
October.....	1,581 38		8 50		1,589 88
November.....	39 60	718 98			758 58
December.....	45 11	5 00	22 00		72 11
1907.					
January.....		928 23			928 28
February.....			2 00		2 00
March.....	200 00	230 75	4 00	100 00	534 75
	3,420 49	1,943 92	40 50	100 00	5,504 91

F. X. GOSSELIN,
Crown Timber and Land Agent.

PERMITS ISSUED AT DAWSON DURING THE NINE MONTHS,
JULY 1, 1906, TO MARCH 31, 1907.

No.	B. M. Logs.	House Logs.	Cordwood.	Hay.
6	155,000			
1		7,000		
101			12,327	
2			(renewed) 347	
17				71 tons
127				

F. X. GOSSELIN,
Crown Timber and Land Agent.

No. 6.

REPORT OF THE DIRECTOR OF SURVEYS.

DAWSON, Y.T., April 15, 1907.

J. T. LITHGOW, Esq.,
Acting Commissioner, Yukon Territory,
Dawson, Y.T.

SIR,—I have the honour to submit the following report of the operations of the Survey Office for nine months ending March 31, 1907.

Mr. Genest (draughtsman) was employed in this office until August 31, since that time Mr. Gibbon, D.L.S., and myself have been the only members of the staff.

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In August and September surveys of base lines, under the code, of the following creeks were made by Mr. Gibbon: Guysboro off Klondike, Belcher off Klondike, Rabbit off Klondike, 20 Pup off Hunker, 21 Pup off Hunker, Hattie Gulch off Hunker, 37 Pup off Hunker.

These base line surveys include surveys of the end boundaries of the claims located on the creeks, and the system has proven very satisfactory. While these surveys are somewhat more expensive, much more information as to location of claims is obtained, and double staking of the same ground is largely prevented.

On account of the office staff being so reduced Mr. Gibbon has considerable field-work for which returns have not been made, namely, the following surveys:—

Clear Creek base line (spring, 1905).

Photo-topographical survey, Klondike watershed (1905).

Barker Creek base line (spring, 1906).

Traverse 40 miles Stewart river (1906).

Plans of the following surveys were filed in this office during these months, and include the surveys made by surveyors in private practice in the Territory:—

Group lots.	12
Advertised placer claims.	13
Base lines.	7
Subdivisions.	2
Reference traverse.	1

I have the honour to be, sir,

Your obedient servant,

C. W. McPHERSON,

Director of Surveys, Y.T.

No. 7.

REPORT OF THE ASSISTANT GOLD COMMISSIONER, WHITEHORSE.

WHITEHORSE, Y.T., April 29, 1907.

J. T. LITHGOW, Esq.,
Acting Commissioner,
Dawson, Y.T.

SIR,—I beg to submit the following report of the Whitehorse district during the past fiscal year.

Only since July 1, last, has the Whitehorse division of the Whitehorse district made any real advance towards becoming a mining camp.

During the past summer Mr. Byron White, of Spokane, started work on the Pueblo and Carlisle claims and met with such success that the Grafters, Arctic Chief and Valerie claims have changed hands and are now being worked with most encouraging results. In addition to the above Col. W. S. Thomas has, on behalf of eastern capitalists, purchased about four hundred claims, including some of the best properties on the range. Col. Thomas is now arranging to spend a very considerable amount in development.

The prospects for this division are now brighter than ever before, and it is now practically assured that, within a very few years, this division will be an important factor in the production of copper.

The Big Salmon division of the Whitehorse district has produced about \$70,000

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in gold during the past season, and promises to equal this for a few years to come at least. In this division Summit, Cottonvea and Livingstone creeks are all producing.

The Nisutlin division has not, up to the present, developed anything of value. Not more than ten men spent last winter in this division.

The Kluane district has produced about \$20,000 in gold, but nothing new has been developed in placer. Several most promising copper areas have been discovered and there is little doubt that a railway through that district would develop many valuable copper mines.

In the Conrad district about \$225,000 was spent in the development of silver gold properties, with good results.

Valuable ore in considerable quantities has been struck on the Montana, Vault, Venus and Big Thing claims, also on the T. M. Daulton properties.

Between 500 and 600 claims were recorded in the Watson division, and about \$20,000 spent in development. Ten tons of ore from the Tally Ho group netted \$46 per ton over freight and smelting charges.

The following will show the fees collected in the different offices since July 1, last, with the exception of the Kluane returns for July, 1906, we having no copy of the Kluane return for that month:—

Whitehorse Office—

Timber.. . . .	\$ 437 37
Land.. . . .	1,580 14
Acce and Crown grants.. . . .	519 84
Gold royalty.. . . .	2,092 04
Free miner's certificates.. . . .	1,105 50
Placer grants.. . . .	200 00
Placer relocations.. . . .	230 00
Placer renewals.. . . .	1,980 00
Placer certificate of work.. . . .	108 00
Placer certificate of partnership.. . . .	10 00
Placer assignment fees.. . . .	208 00
Quartz grants.. . . .	4,340 00
Quartz certificate of work.. . . .	285 00
Quartz certificate of partnership.. . . .	22 50
Quartz payment in lieu of assessment.. . . .	400 00
Quartz registered documents.. . . .	626 50

Total for Whitehorse office.. . . . \$14,144 89

Conrad Office—

Free miner's certificates.. . . .	241 75
Quartz grants.. . . .	1,710 00
Quartz certificate of work.. . . .	172 50
Quartz certificate of partnership.. . . .	5 00
Quartz payment in lieu of assessment.. . . .	200 00
Quartz registered documents.. . . .	132 50

Total for Conrad office.. . . . \$2,461 75

Kluane Office—

Placer grants.. . . .	80 00
Placer relocations.. . . .	570 00
Placer renewals.. . . .	1,775 00
Placer certificate of work.. . . .	142 00
Placer certificate of partnership.. . . .	8 00
Quartz grants.. . . .	90 00

Total for Kluane office.. . . . \$2,665 00

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The foregoing statement shows the total fees collected to be \$19,271.64 for nine months.

Your obedient servant,

L. T. BURWASH,

Acting Assistant Gold Commissioner.

No. 8.

REPORT OF ACTING COMMISSIONER LITHGOW ON AGRICULTURAL PRODUCTIONS.

DAWSON, Y.T., November 22, 1906.

Hon. W. W. B. McINNES,

Commissioner, Y. T.,

Russell House, Ottawa.

SIR,—Referring to a request of the department for a report on the agricultural productions of the Territory, I have the honour to submit that this Territory has made wonderful strides in the past few years in agricultural productions. It was considered in 1898 that it would be impossible to raise vegetables here, owing to the shortness of the summer, but the experiments of the last few years have shown us that we can produce nearly all the vegetables that are grown in other parts of the Dominion. The farming so far is principally confined to the river bottoms, where the soil is richer than on the hillsides. Native hay is largely grown, and the production the past season was about 200 tons, marketed in Dawson, which sold at \$60 a ton. There was also about 100 tons of native oats raised. This is cut green and used as fodder, and realized about \$75 per ton.

The production of vegetables for the past year, taken from the figures furnished by the board of trade, is estimated as follows:—

Lettuce and radishes of a superior quality sufficient to amply supply the wants of the Territory; cabbage and cauliflower, 40 tons; turnips, 40 tons; carrots, 20 tons; beets, 15 tons; potatoes, 75 tons; celery, 1,200 dozen.

The home production of turnips, carrots, beets and celery is sufficient to supply all the local demands, and importations have ceased. The vegetables raised in the Klondike cannot be excelled, if equalled, anywhere else in the world in size and quantity. The forced growth through the summer under the never-setting mid-night sun allows no time for shrinkage or toughening in any way. All vegetables are free from pith, and are unmolested by any form of insect life or any other annoyance known to farmers in many other parts of the world. Many of the Dawson gardeners have stocked their cellars heavily, and will have turnips, potatoes, beets and celery for sale most of the winter. Some have extended greenhouses in which many vegetables are grown through the winter and early spring. Potatoes are grown most successfully in all parts of the Territory. They bring from 5 to 8 cents per pound on the Dawson market. Experiments are being made gradually with hardy grains, and doubtless the Yukon in time will grow far more of the supplies that it annually consumes than it has yet ventured to produce.

Your obedient servant,

J. T. LITHGOW,

Acting Commissioner.

PART VIII.

REPORT OF THE SUPERINTENDENT OF MINES.

REPORT OF THE SUPERINTENDENT OF MINES.

DEPARTMENT OF THE INTERIOR,
OTTAWA, March 30, 1907.

The Hon. FRANK OLIVER, P.C., M.P.,
Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit herewith the annual report upon the conduct of the Mines Branch for the fiscal nine months ended March 31, 1907.

MINERAL RESOURCES.

IRON ORE DEPOSITS.

Field Work.

The field work on the iron ore deposits of Canada covered deposits in Nova Scotia, of the Thunder Bay and Rainy River districts of Ontario and the region along the Ottawa Valley on the Quebec side.

The field party in Nova Scotia was in charge of Dr. J. E. Woodman, Professor of Geology, Dalhousie College, Halifax, N.S.; that of the Rainy River and Thunder Bay districts was in charge of Mr. F. Hille, M.E., of Port Arthur, Ont.; and that along the Ottawa Valley was in charge of Mr. Fritz Cirkel, M.E., of Montreal, Que.

The following are the regions investigated by the different parties:—

Regions investigated by Dr. J. E. Woodman—

1. The Torbrook, Nietaux and Clementsport basins.
2. Some of the North Mountain trap occurrences.
3. The deposits between Windsor and Truro.
4. Brookfield.
5. The Cobequid Mountain iron zone from De Bert river westward.
6. Arisaig.
7. Whycomagh, in Cape Breton.
8. Barachois, in Cape Breton.

Regions examined by Mr. Hille—

- The Matawin.
- The Shebandowan.
- The Atikokan.
- The Loon Lake.

in the western part of Ontario.

Mr. Cirkel examined the iron ore deposits along the Ottawa Valley, a region extending from the city of Ottawa along the Ottawa river on the Quebec side for a length of over 100 miles, and from Ottawa along both sides of the Gatineau river to the town of Maniwaki, a distance of 83 miles, comprising a total area of approximately 900 square miles.

In addition several deposits were examined near Buckingham on the Lièvre river, and north of Grenville on the Ottawa river.

Magnetic Surveys.

On instructions received from you to have a magnetometric survey made of the iron ore property of Black Lake and adjacent region, the services of Mr. Einar Linde-
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man, M.E., were engaged for this work. Mr. Lindeman proceeded to his field of operations on May 17 last, and after a survey of the Black Lake property, continued his survey over a region east of Thirteen Island lake, Thirty Island lake, Black lake, Norway lake, and some distance further in a northeast direction up to Pond Lily lake. Mr. Lindeman having reported that along the whole of this stretch of country only a few small pockets of magnetite of high sulphur content and of no commercial value were found, he was recalled on August 15, and instructed to proceed to New Brunswick to make a magnetometric survey of the Austin-Brook iron ore property near Bathurst, N.B.

This property proved on examination to be a valuable ore field, consisting of eight different deposits, one of 1,800 feet in length, one of 2,000 feet in length, and six other smaller deposits. Two vertical bore-holes 750 feet apart on the 2,000 foot deposit, which dips to the N.W. at an angle of from 50° to 60°, struck the foot wall at a depth of 162 feet in each case, showing in one case a width of the deposit of 85 feet.

An examination of the drill core proved the ore to be part magnetite and part hematite, containing from 48 to 50 per cent of iron.

Mr. Lindeman returned from the field on December 1 and has since been occupied with the plotting and drafting of the magnetic maps.

Monograph on Graphite.

The monograph on Graphite prepared by Mr. Fritz Cirkel and now in the press treats of the following subjects:—

The history, chemical and physical properties of graphite. Modes of occurrence in Canada and other countries. Origin, composition and qualities for commercial purposes. Determination of values by different methods. Statistics of production and prices, &c. Dressing and refining. Finally, the uses of graphite.

This monograph is copiously illustrated.

ELECTRIC SMELTING OF IRON ORE.

The final report on the experiments made at Sault Ste. Marie under government auspices in the smelting of Canadian iron ores by the electro-thermic process is in the press and will be ready for distribution at an early date. The report contains a detailed statement of the work done and results obtained, of all measurements made, of the analyses of the pigs and slags produced and of the iron ores employed. To facilitate the comprehension of the text illustrations are given of the furnace employed, and changes made in its construction and of the machinery employed. Plans are given of two commercial electric furnaces, which have recently been patented. In an appendix a detailed account and description, with illustrations, are given of the recent inventions and improvements made in electric furnaces in Sweden, also an account by Professor Eichhoff, Professor of Metallurgy, of the Technical High School at Charlottenburg, Germany, of the advantages of the Heroult electric process of making high-class steel, and cost of production.

Electric Smelting Plant in Canada.

The first electric smelting plant in Canada for the production of pig iron and later of high-grade steel and steel castings is at present under construction.

This plant will be located at Welland, Ont., on a piece of ground facing the Welland canal.

The first installation will consist of one 3,000 h.p. furnace of the latest type brought out by Dr. Heroult and his associates. This furnace is expected to produce 35 tons of pig iron per day, when not utilizing the gases produced by the reduction,

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and 40 tons when the gases are used for preheating and reduction. The power will be furnished by the Ontario Power Co., of Niagara Falls, at a voltage of 12,000 volts, and then transformed to the required voltage.

This first furnace will be used for the purpose of demonstrating that pig iron can be commercially produced by the electro-thermic process even at such an unfavourable site as Welland, where the price of power is high and the nearest ore supply about 150 miles distant. Some of the ore used will be brought from Port Arthur, containing as high as $1\frac{1}{2}$ per cent sulphur. Other ores of a very refractory nature will also be used, the intention of the promoters being to employ exclusively Canadian ores.

The first furnace will be followed by a second one of probably larger capacity. A Heroult steel furnace will be put down at the same time, and the entire production of the second furnace will be used for the manufacture of high-grade steel castings, which are at present not made in Canada, and also for a limited number of ordinary steel castings.

The electrodes will be manufactured by the Heroult secret process, a plant with a capacity of 18 electrodes per week being constructed.

The organization of this demonstrative plant is due to the efforts of Mr. R. Turnbull, Canadian representative of the Heroult processes and furnaces, and also to Mr. R. H. Wolff, American representative of same. These gentlemen, along with some friends also interested in the above processes, are investing their own private capital in the enterprise, thus proving that not only are they certain of the results that can be obtained by this new process, but are now leading the way for others by taking the first risk and building the first commercial plant.

Electric Smelting Plant in United States.

At Baird, California, an electric smelting plant for the production of pig iron is at present under construction, and is expected to be in operation in May, 1907.

The first installation will be a 2,000 h.p. furnace with a guaranteed output of 20 long tons per 24 hours. If successful, this plant is to be enlarged to a capacity of 600 to 800 tons per day.

The ore which will be employed is a very rich magnetite, containing only a very small percentage of sulphur and phosphorus. The reducing agent will be charcoal, and for the production of the charcoal a plant has already been erected.

TRIP TO COBALT.

In accordance with your instructions of November 28 last, to proceed to Cobalt and obtain information for a report showing the present and prospective output of the mines of the silver-cobalt ores in that locality, the report to contain also a statement of the methods by which the metals are extracted from the ore and the cost of the operations involved, I proceeded at once to Cobalt, where I visited all the important shipping mines for the purpose of obtaining the required information regarding output.

In order to obtain the information regarding the processes employed and cost of operations of extracting the metals from the ore, I visited the smelting works and head offices of the smelting companies in the United States, to which the cobalt-silver ores had been shipped for treatment, namely: The American Smelting and Refining Company, who have their smelting works at Perth Amboy, New Jersey, with head office at 71 Broadway, New York City. The Balbach Smelting and Refining Company, at Newark, New Jersey. The Orford Company, with head office at 43 Exchange Place, New York City.

I found that the American Smelting and Refining Company and the Balbach Smelting and Refining Company have no process for saving the cobalt, nickel and arsenic contents of the ore. The saving of the silver is effected by the use of lead ore

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as collector. No detailed description of the process was, however, available, nor could anything be learned regarding costs of extraction.

A report entitled 'Report on the present and prospective output of the mines of the cobalt-silver ores of the Cobalt district,' giving a detailed statement of the information collected, was issued by the Mines Branch in December last.

Chemical Laboratory.

The preparation of the final report on the experiments made at Sault Ste. Marie under government auspices in the smelting of Canadian iron ores required a large number of analyses of the pig iron and slags produced. On account of the pressing need of this work and the large number of specimens of iron ore sent in for analysis by the field parties engaged in the examination of our iron ore resources, it became necessary to employ a chemist for this work. Mr. Harold Axel Leverin, graduate of the Chalmerka Institute at Gottenburg, Sweden, in chemical engineering, formerly employed as chemist by the Lake Superior Corporation, Sault Ste. Marie, was appointed on July 1, 1906, as chemist of the Mines Branch. By the courtesy of the Director of the Geological Survey, Mr. Leverin was permitted to share the laboratory of Mr. M. F. Connor.

Mr. Leverin reports that his work since July 1 last, consisted in the analysis of 120 samples requiring 739 separate determinations. This work was done under very disadvantageous conditions, the facilities of the laboratory occupied by him being inadequate for accurate and rapid work.

A new laboratory is being fitted up for the Mines Branch and will shortly be completed. It occupies the entire top floor of the Thistle Building, Wellington street, and is partitioned into five rooms, office, laboratory, balance, crusher, store and sample rooms.

The crushing is effected by one Case's Jaw crusher, driven by a one-horse-power induction motor, which also supplies power for the blower. A Wetherhead's mill and an agate mortar grinder, the latter driven by a separate $\frac{1}{2}$ horse-power induction motor, will be used for grinding.

Gas fuel is employed only for the distillation of water and for Bunsen burners, but for all ignition, fusions and high temperatures an electric furnace is employed, and for boiling and evaporating an electric hot plate is used which can be regulated from 100° to 400° C.

The use of electric power for heating is of great advantage in chemical work. Gas, on account of its impurities, considerably interferes with good results and is very destructive to platinum ware.

A special table has been constructed for electrolytical analyses and research work. The electric current at the required volts and amperes is supplied by a storage battery.

The new laboratory is equipped with the most modern labour-saving appliances and instruments, thus making it possible to obtain a maximum amount of work in combination with accuracy and speed.

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DOMINION OF CANADA ASSAY OFFICE.

During the fiscal year ended March 31, 1907, 20,695·84 ounces of bullion, valued at \$336,676.65, were received and assayed. These deposits were derived from the following sources:—

Source.	Deposits.	WEIGHTS.		Value.	
		Before melting.	After melting.		
	No.	Oz.	Oz.	\$	cts.
Yukon.....	61	5,901·55	5,767·96	99,183	73
British Columbia	202	14,582·66	14,111·19	234,896	40
Northwest Territories	2	178·94	126·73	2,118	65
Ontario	1	9·74	9·65	125	68
Alaska.....	3	22·95	22·11	352	19
	269	20,695·84	20,037·64	336,676	65

	Ounces.
Weight before melting.....	20,695·84
Weight after melting.....	20,037·64

Loss by melting..... 658·20

Loss percentage by melting 3·1803.

The following table shows the business done by the assay office since its establishment:—

Fiscal Year.	Deposits.	Weights.	Value.
			\$ cts.
1901-2.....	671	69,925·67	1,153,014 50
1902-3.....	509	36,295·69	568,888 19
1903-4.....	381	24,516·36	385,152 00
1904-5.....	443	29,573·73	462,939 75
1905-6.....	345	21,050·83	337,820 59
1906-7 9 months.....	269	20,695·84	336,675 65

The following is a statement of difference in value of assays between Seattle assay office and Dominion of Canada assay office from July 1, 1906, to March 31, 1907:

Value bars Seattle assay office.....	\$315,001 97
Value bars Dominion of Canada assay office.....	314,643 98

Balance in favour of Dominion of Canada assay office. \$ 357 99

N.B.—Owing to a regulation of the Seattle assay office that no bar of less weight than 1,400 oz. be accepted there is a bar of gold valued at \$22,032.67, being held in Dominion of Canada assay office on March 31, 1907.

STATEMENT OF EARNING AND EXPENDITURE.

Deposits of gold.....	\$336,676 65
Earnings—	
Value of sweeps and recovery of grains.....	461 26
Expenditure.....	10,046 58
Percentage of net expenses to deposit 2·8469.	

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STATEMENT of Expenditure made by Dominion of Canada assay office, Vancouver, B.C.,
from July 1, 1906, to March 31, 1907.

Rent.	\$1,575 00
Power and light.	101 42
Gas and fixtures.	177 55
Chemicals.	22 95
Repairs and alterations.	143 50
Water taxes.	14 40
Postage.	14 00
Stationery and printing.	18 76
Assayers' materials.	84 60
Melters' supplies.	82 86
Telegrams.	32 95
Freight and express.	317 09
Telephone.	33 00
Office supplies.	15 53
Hardware.	20 18
Premium on bond.	534 50
Thos. McCaffry.	1,458 31
J. B. Farquhar.	1,141 66
G. Middleton.	1,291 66
A. Kaye.	1,133 33
D. Robinson.	775 00
Miss Tierney.	548 33
G. McCaw.	150 00
J. O. Sullivan.	340 00
T. Fitch.	20 00
	<hr/>
	\$10,046 58

The following is a statement of money received and expended by the Dominion of Canada assay office, Vancouver, B.C., to March 31, 1907, and shows the unexpended balance of the appropriation to be \$614.68.

Appropriation.	\$10,200 00
Value of sweepings and recovery of grains.	461 26
	<hr/>
Total.	\$10,661 26
Expenditure to March 1, 1907.	10,046 58
	<hr/>
	\$ 614 68

Inventory of Gold, Proof Gold and Silver on hand March 31, 1907.

	Ounces.
Bar No. 268.	4·38
Bar No. 269.	12·83
Office bar No. 16.	1,315·71
Clippings.	1·04
Proof au. in solution.	16·71
" on hand.	3·21
Proof ag. (large disks).	82·84
" (small disks).	22·65
" (bars).	168·50
Cornets.	·39
Silver chloride, about.	·60

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Inventory of Residues and Supplies on hand March 31, 1907.

1½ barrels slag.			
3 sets linings with stools and covers complete for No. 1 size furnace.			
1 set lining, with stools and covers complete for No. 2 size furnace.			
1 set lining with stools and covers complete for No. 4½ size furnace.			
3 sets linings with stools and covers complete for No. 7 size furnace.			
48	graphite crucibles	No. 10.	
108	"	No. 16.	
75	"	No. 30.	
28	"	No. 40.	
		o	
88	"	No. o o	
		o	
8	graphite crucible covers	No. 10.	
11	"	"	No. 16.
22	"	"	No. 35.
11	"	"	No. 50.
6 lbs. pot. nitrate.			
35 lbs. carb. soda.			
60 lbs. borax glass.			
Bone ash, about 50 lbs.			
Cupels, about 9,000 lbs.			

Changes in the Staff of the Assay Office.

I regret to state that Mr. Thomas McCaffry resigned his position as manager of the assay office, to take effect on February last, to assume a more lucrative position as bank manager. It gives me pleasure to state that the efficiency of the Dominion of Canada assay office is largely due to the excellent judgment and management of Mr. McCaffry. The position vacated by Mr. McCaffry was filled by the promotion of Mr. G. Middleton, chief melter, who has been in connection with the assay office since its inauguration. Mr. Robinson was promoted on February 1 last, to the position of chief melter vacated by Mr. Middleton, and Mr. George McCaw was appointed as assistant melter and janitor to fill the position vacated by Mr. Robinson. Mr. McCaw resigned his position in March last, on account of ill health.

OFFICE WORK.

Mr. Erik Nystrom has been occupied in preparing the material, making calculations and drawings for the final report on the electric smelting experiments at Sault Ste. Marie, and in carrying the report through the press.

Mr. B. F. Haanel has been occupied in carrying the report of the Zinc Commission and Monograph on Graphite through the press.

In addition to this work he constructed the following drawings—

1. Black and white map on tracing linen of the vertical intensity map of the Belmont iron ore deposit, for the purpose of photographic reproduction.

2. The same for the Wilbur mine.

3. Drawings and tracings of plans and elevations of graphite mills to accompany Mr. Cirkel's report.

4. Tracings of three blue prints to accompany report on electric smelting experiments at Sault Ste. Marie.

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Numerous requests were made during the year for information on the mining and metallurgical industry of Canada, the occurrence of economic minerals, and for advice regarding smelting operations. The correspondence for the nine months of the fiscal year ended March 31, 1907, amounted to 2,360 letters.

I have the honour to be, sir,

Your obedient servant,

EUGENE HAANEL,

Superintendent of Mines.

REPORT OF MR. FRITZ CIRKEL.

Preliminary Report on the Examination of the Iron Ore Deposits in the Ottawa Valley, by Fritz Cirkel, M.E.

I beg to submit herewith my preliminary report on the examination of the iron ore deposits in the Ottawa Valley.

After having made all preparations for a 4 months trip in the Ottawa valley, I left Montreal on June 4, for the village of Bryson, in the township of Litchfield. I made Bryson my headquarters up to June 8, making daily trips into the country and especially to the Island of Calumet, where a number of iron ore deposits had been discovered. From Bryson I inspected also a large portion of the eastern part of the township of Clarendon, as well as the formation exposed to a great extent in the centre of the township of Litchfield. Some very promising outcrops of magnetic iron ore were examined, but as very little work had been done, and as a great part of the rocks were concealed by heavy underbrush, it was difficult to form an opinion regarding their extent. Judging from the samples taken at various places of the outcrops the quality of the ores seems to be very good. A thorough examination and sketch plan were made of the famous Calumet Falls near Bryson, which by their splendid and convenient location as well as their grandeur cannot fail to make a great impression upon the visitor. On June 9 I left for Portage du Fort, on the Ottawa river, about 8 miles distant from Bryson in a southern direction. From this point several reported iron ore deposits were examined in the township of Clarendon, but only one of them was found to be a hematite, while all the others consisted solely of iron pyrites. An examination of the falls near the village was made and a sketch plan drawn, also the topographic and geological features of the country noted.

On June 12 I left Portage du Fort and made a trip through the township of Clarendon, taking in the principal topographic and geological features, as far as Shawville on the C.P.R., where I took the train for Campbell's Bay. From this point several excursions were made to the northern and western part of Litchfield and to the Island of Calumet. On this island iron ore deposits were visited, which could not be reached conveniently from the village of Bryson. Several promising magnetic iron ore deposits were inspected west of Campbell's Bay. One of them had been explored to a depth of 40 feet and a large tonnage of clean high-grade ore was extracted. All the ores found in the vicinity of Campbell's Bay were of the magnetite variety.

On June 14 I left Shawville for Fort Coulonge, situated on the river of the same name. From this town several trips were made into the country, one iron ore deposit and two water-powers were examined. Of special interest are the great Coulonge River falls on lots 8 and 9 in the township of Mansfield. The Coulonge river forms a succession of several high falls, which for beauty and grandeur are not surpassed by any other falls on the Quebec side. A slide for the transportation of timber has been constructed over these falls, but otherwise the latter are not utilized at all. In travelling through the country notes were made of the topographical and geological features.

On June 16 I left for the village of Waltham; no iron ore is known to exist in the vicinity of this village, but about one mile distant a splendid water-power was examined. The Black river forms a succession of falls which at present are being developed for the purpose of supplying the town of Pembroke with electric power and light. On June 17 I left Waltham for Sheenboro' stopping over night in the village of Chapeau, situated on the Island of Allumette. From Sheenboro' several occurrences of iron ore were examined, the most important one was a magnetic deposit

owned by Mr. Gareau, of Pembroke. Some work had been done on this property and several tons of ore extracted for sample shipments. On June 20 I left for Fort William, on the Ottawa, and from there travelled over the Pembroke and Ottawa to Montreal. (Owing to the sudden death of my mother I was compelled to interrupt my work for a few days.) On June 28 I left Montreal for the city of Quebec in order to get all the information regarding the water-powers under control of the provincial government. I had an interview with the government engineer, Mr. C. Ed. Gauvin, C.E., who did everything in his power to obtain for me the desired information.

On July 3 I left Montreal for Ottawa and after arranging some preliminaries there I left in the evening for Buckingham. Here several outcrops of iron ore were reported to occur in the immediate vicinity, but on driving out to the different places I found that nobody could direct me to the exact location of the outcrops. I inspected two places where a dark rock, mostly hornblende or diorite, had been mistaken for iron ore. On July 6 I returned to Ottawa and visited the Ironsides mine. Diamond drill boring had been carried on for several months by an American company, and I arranged with the engineer in charge for an examination of these mines later on.

From July 9 to 24 I visited the country along the Gatineau river, from the town of Maniwaki about 90 miles north of Ottawa down to North Wakefield. I travelled through the townships of Maniwaki, Bouchette, Cameron, Wright, Aylwin, Low and Masham, but only in the township of Cameron are there apparently extensive deposits, which invited a thorough investigation. Outcrops and indications can be noticed all along the range of hills between 31 Mile lake and the Gatineau river in the township of Cameron, but as no work of importance had been done on any of the deposits it was very difficult to determine their exact character. All the water-powers from the Six Portages near Bouchette in the north down to the Chelsea falls near the confluence of the Gatineau with the Ottawa were examined, while the geological as well as the topographical features were studied.

From July 26 to August 8 I camped at the Bristol mines in the township of Bristol. These works were in operation about 25 years ago and the various reports circulated regarding the extent of the ore bodies led me to make a thorough study and survey of all the pits worked. I was to some extent handicapped in my work by the inaccessibility of some of the more important pits, which were filled with water. I also studied and noted the iron-bearing formation in the vicinity of the mines, especially towards the Ottawa river, which enabled me to arrive at certain conclusions regarding the extent of the ore bodies so far developed.

From August 8 to 11 I camped in Pontiac village in immediate vicinity of the Chats falls. All the falls were thoroughly inspected; sketches were drawn and the general character of these immense water-powers with a view to their development studied.

August 13 and 14 were spent in Ottawa interviewing owners of iron ore deposits and water-powers, and getting together particulars and obtaining permission to inspect the properties.

From August 15 to 25 I camped near the Haycock mines in the township of Hull. A thorough examination of these locations was made, a great number of samples taken and a complete survey made of all the mines which were in operation some 30 years ago. The ore is a mixed hematite and magnetite and appears to be of good quality. It must be pointed out, however, that the proper examination of these mines was very difficult on account of the heavy underbrush and water which was found in most of the more important pits. There were a number of iron ore deposits in the vicinity of these mines which were also examined and where possible surveyed.

From August 25 to 29 a tour of inspection was made on the eastern and northern shore of McGregor lake in the townships of Templeton and Hull. Several places on which iron ore was supposed to occur were visited, but nothing of great importance could be found.

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From August 29 to September 8 the old iron mines of Ironsides and the continuation of the iron-bearing range towards the west were thoroughly examined and a detailed survey made of the old Forsyth mine. On the latter diamond drilling had been carried on since the spring by American parties, who had an option on the property. Application was made for permission to inspect the cores of the diamond drillings but this was refused for private reasons. However, the writer was enabled by the great number of openings over the Forsyth mine and adjacent locations to study the extent of the iron-bearing formation, and to collect valuable data.

Having received information that an iron deposit had been discovered near Sheenboro', in the western part of Pontiac county, I revisited this country; but an examination of the supposed location revealed the fact that a dark rusty-looking rock had been mistaken for iron ore. On some places considerable work had been done, and the writer advised the interested parties to abandon their location.

Several iron outcrops were examined in the immediate vicinity of the Haycock iron mines, and on the south shore of McGregor lake, in the township of Templeton.

As a result of my season's work I must say that although most of the iron ore deposits examined along the Ottawa river (Quebec side), and the Gatineau river appear to be of limited character, and are scattered in irregular fashion over the country, there are two iron-bearing ranges which by reason of their extent and development as well as of the excellent character of the ore are destined to become the centres of a new iron industry, especially so when it is considered that there are a number of splendid water-powers in immediate vicinity, from which power for mining and electric smelting purposes may be derived.

The results of my examination of the iron ore deposits so far discovered in the county of Pontiac will be laid down in an exhaustive report which is now in course of preparation.

Respectfully submitted,

FRITZ CIRKEL.

REPORT OF MR. F. HILLE.

*Preliminary Report on the Iron Ore Deposits of Western Ontario, by
F. Hille, Port Arthur.*

PORT ARTHUR, ONT., November 25, 1906.

SIR,—In compliance with your request to forward a preliminary report, I beg to submit the following:—

After the receipt of your instructions to investigate and report on the iron ore deposits of western Ontario, I proceeded on June 15, with two men, to the Loon Lake region.

On account of delays I was compelled to confine my examination to the Loon Lake, the Matawin, Shebandowan and Atikokan River regions.

The Matawin Range.—Being well aware of the importance of this range, I took special care not only to examine such deposits as were already known, but also to prospect for extensions of these or for new deposits hitherto undiscovered.

The largest quantity of the ore occurring along the Matawin river is a magnetite of somewhat low-grade, but at the same time the massiveness of these deposits and their favourable situation as regards the railway would have the effect of lessening to a considerable extent the cost of mining and shipping.

A portion of the Matawin magnetite has been changed into a martite, close-grained and somewhat slaty in appearance, but otherwise very firm and compact.

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Large deposits of this kind of ore exist along the west shore of the Matawin river, not very far from the upper falls, especially on locations W 221 and 222. As an example of the size of only one of these deposits, I may state that I have traced it in width nearly 900 feet and in length nearly one mile, and when we take into consideration the fact that the formation in which it occurs stands almost vertical and extends for several miles we can form some conception of its extraordinary size.

The country rock along the Matawin is a chlorite schist, but locally it has undergone considerable and varied changes. At one point it is pressed into a finely slated rock, which, on exposure, disintegrates into very fine green or bronze coloured scales; at another point it resembles a fragmental rock, in which the smaller and larger pieces are cemented together again by a darker silicious iron solution; or again it is changed into a hard, compact silicious rock, almost a quartzite; or at other points into a serpentine rock of dark green appearance.

Intrusions of gabbro, granite and diabase can be observed in dykes at various places, but they are principally exposed in the rock cuts of the railway, which follows the depressions or synclinals of the schist, whereas they are rarely seen at or upon the anticlinals.

The origin of the ore is very plain; the mineral solutions, that is of iron and silica, have flowed through the fissures and deposited ore and silica, either in chemical combination, as an iron silicate, or as a mechanical mixture, or separated, in bands of alternate purer iron and jasper.

The age of the deposition must be the same as that of our Animikie rocks, dating from Pre-Cambrian times. If this is correct, then the iron must have been deposited in the form of a carbonate and was changed later by heat, produced either by pressure or by the younger eruptive rocks. How immense the pressure must have been is shown by a number of jasper beds which originally consisted of bands of various sizes and had a straight course both horizontally and vertically, but which now show the most wonderful contortion, being twisted into every imaginable form and direction. In places we notice that these bands are elongated, stretched or bent as if they had been heated to a point where they became a viscous mass.

I will now take up a somewhat more detailed description of the locations examined, both south and north of the Matawin river.

In each case, before proceeding with the examination of the ore deposits, I commenced by establishing the survey lines of the different locations, this not being always an easy task, partly on account of the poor cutting out of the line at the time that the locations were surveyed, and partly on account of the disappearance of nearly all the land-marks through the decaying of the stumps and posts and through the heavy undergrowth of hazel, alder, willow and other shrubs. At times also great inconvenience was caused by there having been a second or even a third re-survey into small lots, over one and the same location, and by the wrong markings on the posts.

As soon as the correct lines were established the iron deposits were located with the help of the dip-needle. This being done, the extent of the deposits was investigated, not only by the use of the needle, but also by stripping, wherever it was desirable or possible.

I commenced in this manner on the locations south of the Matawin river, where in the year 1890 the late James Hammond, of West Fort William, had taken up and had surveyed an extensive area of land, consisting of locations W 221 to 225, and R 415.

The first location examined was W 221, containing 320 acres. The dimensions of the iron ore formation on this lot, as shown at the surface and where it is stripped, is 495 feet in length, by 99 feet in width at the west end and 49 feet at the east end. At the former extremity the jasper predominates, showing there most wonderful contortions, while at the east end the iron bands become larger and the jasper bands smaller. Whether, with depth, a greater concentration of the iron will be revealed has yet to be proven.

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R 415, 80 acres, joins the former location on its easterly boundary, but no iron ore could be detected there.

W 212, 320 acres, adjoining W211 on the west side, was formerly supposed to contain no deposits of iron ore and, indeed, no continuation of the iron formation of W 211 could be traced across the boundary line, although it comes so close to it. Further to the southeast on W 212, however, the dip-needle and stripping revealed a very good deposit of ore, much cleaner than that on the neighbouring location. Of this I exposed to view an area of 56 feet by 30 feet.

Next in order came W 213, which I prospected in vain for iron ore. This in itself is not intended to imply that there is no ore upon it, for a considerable portion of this location is, like the northwest part of W 212, swampy and covered with very dense underbrush, which rendered thorough examination extremely difficult and at times impossible, the use of the axe being constantly required.

W 214, 240 acres, adjoins the last named property on the west side. In the centre of it there is a deposit of silicious magnetite, which, after stripping, showed a width of 213 feet and a length of 309 feet. Although this deposit contains some bands of jasper, they are not nearly so numerous as on W 211. In place of these the ore body seems to have incorporated into it a certain amount of the country rock, thus forming an iron silicate and an ore in which the rock matter forms a mechanical mixture.

On W 215, 250 acres, I succeeded in showing, by means of an extensive track-survey with the dip-needle, the existence of several deposits of ore and, the covering being in places very shallow, I was able to strip these at three different points. The character of the ore on the surface is similar to that on W 214, but perhaps not quite so silicious or so much banded with jasper. This deposit forms a continuation of that on the following location, W 216.

W 216, 284 acres. Here the ore is prominently exposed on the top of a hill 253 feet above the level of the railway. The width which I was able to establish in several places is over 400 feet, while the length is over 1,300 feet. The quality of the ore is the same as that upon the last named location, and shows the leaching action of the meteoric waters and humic acid. There is, however, no doubt that the quality of the ore will improve upon attaining depth in the deposit, a fact which I could observe on several other locations upon which mining, that is to say test-pitting, had been done.

W 217, 310 acres, contains the extension of the same deposit, but here it is considerably intermixed with the country rock. It is possible that there are other places on this location where the ore is purer, but this is a fact which I was unable to establish, mainly on account of the heavy wind falls of poplar and jack pine which at times proved a most annoying hindrance to our even passing over these locations.

W 218, 310 acres. On this location I was more fortunate yet in finding iron ore, both as regards quality and quantity. I made the first discovery near the centre of the location and I was able to trace it in a continuous line, not only to the west boundary of this location, but also nearly to the west boundary of the adjoining location, W 219, the total length being 2,731 feet, and also by repeated stripping I established the width as being nearly 700 feet upon the first location. The deposit passes over the top of a hill on W 218 where a number of blasts have been put into the ore body, showing the ore to be much purer than it was on the surface. Two diamond drill holes have also been put down in this deposit, but a record of the results is not obtainable. At the centre of the location, where I first detected the ore, it appeared to me to be of even higher quality than at the point where the work has been done, but whether this is the case will be demonstrated by the analyses. Here the Matawin river, which crosses these two locations, forms three falls, which, if properly dammed, could develop from 1,500 to 2,000 h.p. At the time of my visit the river was exceptionally low, owing to the very dry and hot summer, but every facility exists there for the building of an effective dam and one which would at the same time not be too costly. Following the strike of the iron deposits westwards, we now reach the location adjoining W 219.

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W 220, 80 acres. Although the dip-needle indicates the presence here and there of some small belts of iron ore, I could not locate any such deposits with sufficient accuracy to make it worth while mentioning them. It would, of course, be incorrect to make the bald assertion that there are none, since the swamps, fallen trees and other obstacles prevented a very close examination.

W 221 and 222 together comprise 320 acres. These two locations must be considered together, because the iron deposits on them are common to both. It is upon these two claims that the greater part of the prospecting work in connection with the Matawin range has been done, in sinking pits, stripping and diamond drilling. There is no doubt that the largest deposits of iron ore yet known in this country are on these two claims. The quality is, of course, not entirely uniform. Some are more silicious, some far less so; some are banded with jasper, others appear to consist of nothing but jasper bands. Most of the ore, however, is of a comparatively good quality, solid and dense, with a slaty structure, and is the only ore on the whole range which has been changed into a martite. This change has taken place most probably through the heat produced by pressure, and the heat produced by intrusive eruptives, but always in conjunction with the presence of air as an oxidizing agency. I have already mentioned the size of the largest deposit on these locations.

In the maps accompanying my general report I shall show the workings, consisting of pit-sinking, trenching and diamond-drill holes, giving the locations of all the work done. Enough has been said concerning these claims to prove that they are of considerable importance, not only on account of the magnitude of the deposits, but also because their favourable situation and their massiveness would ensure cheap and easy mining.

These two locations mark the most westerly point to which my examinations of the present year have extended. My reason for not pressing still further west, where there are yet a great number of deposits, was that the canoe routes were so poor this summer that I would have lost considerable time in packing from place to place.

Shebandowan River District.—I returned, therefore, to the Shebandowan River district, where a number of locations had to be looked over upon which, I understood, iron ore deposits existed. After a diligent search upon some of the most promising claims, I succeeded in finding some high-grade magnetite, intermixed in places with bands of jasper. The claims upon which I found this were R 476 and R 484, the first containing 160 acres and the latter about 180 acres. Here I stripped several places for a width of from 40 to 60 feet and was able to follow the strike of the deposits over the whole width of R 476 and into the adjoining R 484. Farther west, on R 471, R 470 and R 478, the iron contents diminished and the jasper increased.

The Shebandowan river has a fall of several hundred feet from its source at Shebandowan lake. This lake is 20 miles long, and Kashaboiwe lake, which empties into the former, is about 10 miles long. Both of these lakes are in places several miles wide, and have a large drainage area, forming the best reservoirs imaginable. Besides these two rivers, the Kaministiquia Power Company, from their development at Kakabeka falls, could probably spare from 5,000 to 6,000 h.p. for some time to come, and could easily develop 10,000 additional, if necessary, so that we are assured that there is plenty of power available for electrical purposes.

The country in the vicinity of the Matawin as well as of the Shebandowan rivers is well wooded with good sized jack pine, spruce, birch and poplar, from four to eighteen inches in diameter, enough to last for many years as a source of supply for building material or as wood for charcoal burning.

In normal years a number of fairly large creeks drain the country and from these, in addition to the supply from the other two larger rivers, sufficient water could be obtained for all purposes.

A considerable area of these lands could be utilized agriculturally. The hill-sides and the valleys extending between the ranges of hills are in many places covered by

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glacial drift, consisting of a fine, sandy loam or clay, and often having considerable depth of fertile soil.

Atikokan River district.—Having completed my work on the Shebandowan, I moved my camp on October 1 to the Atikokan river, at the point where it flows out of Sabawe lake. From this as my base, I visited the iron deposits along the Atikokan, on E 10, E 11, R 400 and R 401, of which the first two are now better known as the mine of the Atikokan Iron Company. Considerable surface work has been done here, elaborate and roomy buildings have been erected, machinery for crushing the ore is installed, and arrangements have been completed for loading the crushed ore into railway cars and forwarding it to Port Arthur. The hoisting engines and air-compressor are almost completed, and the warehouse, blacksmith shop and washing and bathing-house are nearly ready for use. In addition to these, there are two large structures, one for use as a sleeping house and the other for a dining camp and offices. Actual mining has been done on only a very small scale, the work consisting of the partial widening of an old tunnel, probably for the purpose of making room for actual mining operations. This work was finished during the early part of last summer, but since then nothing has been done that would indicate any preparations for immediate commencement of active operations in order to take out ore to feed their blast furnace in Port Arthur.

Although I had already a thorough acquaintance with these locations, I once more examined very minutely the ore deposits, which consist of a large dyke of norite containing lenses of pyrrhotite and magnetite. It is undoubtedly the case that they might be able for a year or two to mine sufficient ore for their works, but after that it will be hunting for a needle in a haystack. Further, it is doubtful whether they will be able to eliminate all the sulphur from this ore, it being extremely dense and heavy, except by pulverizing it very fine and applying an intense heat.

Two miles down the river, on locations R 400 and R 401, some prospecting work was under way at the time of my visit. A few trenches had been cut into the top of the dyke and a tunnel continued. This, however, revealed nothing better than had already been shown up on E 10 and E 11.

Diamond drill work has been done on all these locations years ago and during the prosecution of the work I either sampled the cores and tested them, or made the plans of the drill holes, with the exception of a few holes drilled in a location situated further east. I, therefore, am well informed not only as to what I can learn from the surface, but also as to the contents of the interior of the dykes. My paper with its illustrations on 'The Genesis of the Atikokan Nickeliferous Pyrrhotite Deposits' gives a true picture of what they really are.

After completing the examination of these locations, I broke camp on October 15, and before abandoning the field work I made a trip to the south of Port Arthur, for the purpose of examining the rock formation, &c., in some localities along the shore of Lake Superior. During the course of this trip I experienced a bad shipwreck near Point Brûlé, in which I lost a number of my instruments and, I am sorry to say, all the photographic films from the Atikokan mine and other places.

On October 18 I arrived home.

Loon Lake District.—At the beginning of this report I mentioned that I had first of all examined the Loon Lake hematite deposits. My principal reason for this was that these iron deposits had created a considerable amount of interest at the time, and I wished, therefore, to be prepared in case you or any others of the department in Ottawa should ask for information about them.

My previous judgment in regard to these iron deposits, made in years gone by, when they were first revealed during the height of the silver mining boom, was simply confirmed upon revisiting them after considerable additional work had been done upon the deposits.

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The locations that have been most recently developed are those of Mr. R. McConnell, of Ottawa, and Messrs. Wiley Bros. and R. Flaherty, of Port Arthur. They consist of the southeast quarter of section 8, concession 8; the northeast quarter of section 9, concession 8; the southwest quarter of section 8, concession 7, and the west half of lot 1, all in the township of McTavish. On the first three the iron ore is very shallow and of low-grade. From 0 to 6 feet of ore can be observed in the shafts, of which there are about 16, and in two diamond drill holes. The conditions on the western part of lot 1 are somewhat different. Here the ore is a little more massive and of greater extent, and in addition to this there exist nests or pockets of high-grade ore through the deposit.

Although these hematite deposits are of but little commercial value, they are, however, of considerable importance as being excellent indications of what we may expect to find in the deeper basins where the Animikie rocks occur in greater thickness. Such is the case south and southwest of Port Arthur, where these rocks are in places probably 3,000 feet in depth. When, therefore, we consider that these rocks are absolutely identical with the iron-bearing rocks of the Mesabi, and that the same conditions which are found on the other side of the international boundary line exist identically on other portions of our range, we can readily comprehend the importance of all these indications of potential wealth in iron ore, scattered over the whole of the district where the Animikie rock formation is found.

These rocks consist chiefly of siderite, ferruginous chert or a cherty iron carbonate, and are of Pre-Cambrian age. They are distributed over a considerable area, comprising about one million acres, and they rest principally upon the Laurentian granite, or lean upon or against the margin of the Keewatin, and are intruded by gabbros, diorites, granites and diabase, and overlaid by the so-called slates, former ash-beds, and the rocks of the Nipigon series, while the whole of this rock area has been covered by an overflow of diabase.

In the vicinity of Loon lake, out of the twenty or more locations that I examined, very few are well wooded, except in swamps, where we sometimes find good sized spruce, cedar, poplar and birch, with an occasional sprinkling of jack pine.

Water is found abundantly in lakes and little creeks throughout the entire region, which is broken and hilly, but has a general slope towards the south, in the direction of Lake Superior, that is, of Thunder Bay.

Respectfully,

F. HILLE.

REPORT OF MR. J. E. WOODMAN.

Preliminary Report on Iron Ore Deposits of Parts of Nova Scotia, by J. E. Woodman.

DR. EUGENE HAANEL,
Superintendent of Mines,
Ottawa.

SIR,—In accordance with instructions from you under date May 26, 1906, work was begun on May 30, upon an investigation of the iron ore resources of the province of Nova Scotia, and continued throughout the field season. Short trips are being made also at favourable times through the winter. Besides myself, the party consisted of Mr. F. H. McLearn during the summer, and Mr. J. B. Morrow until July 1, succeeded by Mr. F. A. Grant for the remainder of the time. These were all fourth-year students in the School of Mining and Metallurgy of Dalhousie University. Additional temporary service was secured when necessary, in some instances furnished by the cor-

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porations or individuals controlling the mining areas under investigation. I desire to take this opportunity to express appreciation of the unfailing courtesy of all those who have been appealed to for aid or information in connection with this study.

I.—GENERAL.

PRACTICAL AIM OF THE WORK.

Your instructions have emphasized the importance of conducting the examinations with a view to furnishing information directly available for the practical iron worker and the public. This has been the aim throughout. In one or two instances considerable time has been spent upon the pure geology of a district, but only where the productiveness of the region depended largely upon the rock structure. The Torbrook basin is a notable illustration of this.

SCOPE OF THE INVESTIGATION.

A glance at the widely scattered literature upon the iron ore resources of the province shows that already too much superficial examination has been made, and too little detailed study to be of marked value to the public. In the present instance instructions were given to make as complete a survey of the deposits of Nova Scotia as the field work of the season would permit, and to take first those which are favourably located as regards transportation. The evident intent was that those deposits should be first studied which are now, or are likely to become in the immediate future, commercially important. In attempting to carry out the spirit of these instructions, it was deemed advisable to go into as much detail as possible in a few districts, to the end that the information gained might be substantial; leaving other areas for possible future study. Another consideration influenced the choice of districts, namely the occurrence of the ore; and the attempt was made to give each of the varieties of ore and types of formation present in the province a share in the study. In addition to this detailed work other districts were visited briefly for comparison and general knowledge, but of these no specific report will be made at present.

The districts covered (1) the Torbrook-Nictaux and Clementsport basins; (2) some of the North Mountain trap occurrences; (3) the deposits between Windsor and Truro; (4) the Cobequid Mountain iron zone, from DeBert river westward; (5) Brookfield; (6) Arisaig; (7) Whycocomagh; (8) Barachois, the last two in Cape Breton. That important deposits were left until a later time is true; but selection had to be made, as part only of the total number of occurrences of iron ore could be examined in one season. Each of these, beside having a past, present, or possible future importance, is characteristic of one or more classes of deposits; and a brief review of the field conditions, at the end of this summary, will serve to indicate perhaps why there are not more deposits in Nova Scotia that have been proved to be extensive and of high iron content.

CONCENTRATION OF IRON INTERESTS.

The question naturally suggests itself in connection with any inquiry into the iron ore resources of the province, what possibility might arise of establishing other smelting centres besides those at Sydney Mines, Sydney and Londonderry. It is, therefore, profitable to see how the ore localities group themselves geographically. A natural division, based upon proximity of situation and ease of transportation, would be (1) a western section in Annapolis and Digby counties, with Annapolis as the centre; (2) a west central section, with Londonderry as the centre, draining Kings, Colchester and Cumberland counties; (3) an east central section, with its centre in or near the Pictou coal field; (4) an eastern division with its centre at Sydney and

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Sydney Mines. The last would drain all the Cape Breton ores now known, unless some of them unexpectedly develop sufficient size to warrant the erecting of separate smelters. Arisaig, in Antigonish county, would be accessible to the eastern centre by water, or to the Pictou county centre by a short rail haul. Of these two routes the former is already in existence, the latter may or may not be feasible in the future. The body of iron ore present at Arisaig has led its holders to hope for the erection of a local smelter in the future. Only the most thorough underground exploration of the field can determine whether this would be advisable.

Finally, the question is at least worth consideration, whether it may not be possible at some time to use Parrsboro, on the Bay of Fundy, as a central smelting and shipping point, bringing to it both the Cobequid ores from Londonderry and elsewhere, the bedded ores from Annapolis county, and others from small centres within reach, and using Cumberland county coal. The possibilities of extension of development of the latter are very considerable, and there is little doubt but that sufficient supply can be got for any scale of metallurgical operations likely to arise in that part of the province.

BOUNTIES TO IRON ORE MINERS.

In this connection, it may not be amiss to note one feature brought out by the season's work. It appears likely that large deposits of such grade as to become smelting centres are few in this province. Small deposits, both of high and medium grade iron ore, are numerous. Others are of such size and value as to require but a slight encouragement for their owners to open them up, selling the ore to one of the existing smelters. If one or more new metallurgical centres should start up in the future, the possibilities along this line will be materially increased.

The encouragement which small and isolated deposits require is a selling price that will bring their owners some profit. At present there is no inducement for the small owner to carry his raw material to the smelter; for, in spite of a bounty on pig iron and steel from native ore, competition with foreign ore favours the latter. While all the direct financial aid goes to the iron master, the initiative in seeking native iron ore will be left largely with him. If, as at present, he is moderately well satisfied with the conditions of supply, he will not offer enough for native ore to give the producer any appreciable part of the profit which the bounty should insure.

If, on the other hand, a cash bonus be paid directly to the iron miner, he will be stimulated himself to offer his wares; and the result will often be a bargain from which both parties should derive profit. Without in this place elaborating upon the theme, the conditions in the field indicate that what is needed to stimulate the owners of small iron deposits to activity is a bounty, federal or local, so framed as to insure that they shall receive a fair proportion of it. Steel men themselves have expressed the opinion that the new plan of increasing slightly the present bounty on the manufactured product will be no more stimulative to the country than was the old. Under the existing method, any bounty paid goes to enrich the stockholders of iron and steel companies; under the system here advocated, the money would stand some chance of being distributed, in moderate amounts, among a class needing it sorely.

TITLES TO IRON LANDS.

In Nova Scotia two systems obtain, under which iron ore is held at the present day. It is impossible in a preliminary report to go into the legal aspects of the case, but mention is made here, that anyone interested in iron ore may be on guard against the complexity of the titles in many places.

In some parts of the province, where the land is held under grants prior to 1808, the iron ore goes with the land, and title to the ore must be sought from the present owners of the land instead of from the Crown by lease. In other regions, practically

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all the iron is reserved, and license to search or lease must be obtained from the Crown, through the Commissioner of Mines at Halifax. The former status obtains especially in the Nictaux-Torbrook, Clementsport, Londonderry and Guysboro districts entire, and in large areas in Antigonish, Pictou and Colchester counties.

In some places Crown grants (especially 'soldiers' grants') alternate with land in which the iron is reserved to the government, in a most bewildering manner; and it is a delicate matter to steer so straight as to secure options from all owners of iron ore and only those, and to lease from the Mines Department all the rights properly belonging to the Crown. It is easy to let the two systems overlap, and much confusion results. The Arisaig district is a case in point.

A common method among local promoters, for gaining control of the iron ore when its title goes with the land, is to secure an option from the owners, paying a small deposit, say \$100, the remainder to be paid upon sale. Cases are commonly reported to have occurred in which the owners, after waiting a considerable length of time for the first bonders to put through their 'deal' and consummate the purchase, have yielded to the persuasion of a later adventurer, and rebonded the iron for the payment of another hundred dollars. Thus the difficulty of a final purchaser in securing clear titles is rendered very great, and what otherwise might result in a large transaction may fail through discouragement.

Unfortunately, it is to the interest of any 'promoter' to get an option upon such properties lacking a time limit; but it would seem to be entirely to the interest of any land and iron owner to require a time limit, and to adhere to it rigidly. Thus, should the scheme of the first bonder fall through, the owner can rebond with a clear conscience, and no probability of becoming involved in litigation at some later time.

LEASING FROM THE CROWN.

Assuming that the information contained in the report is largely for those outside the province, the following is a general statement of procedure in acquiring rights to iron ore reserved to the Crown.

The districts are divided into 'areas' of five square miles each, in shape 2.50 x 2.00 miles. If no areas have been previously located in a district, they will be located by the Mines Department at Halifax in such situation as to suit the applicant.

'License to search' may be taken out for these areas. For this purpose and for leasing, each area contains five 'rights' of one square mile each. The applicant must, on or before the expiration of eighteen months after issue of his license, take out a lease for a square mile, locating it at any part of the property he chooses. If he has taken out the full number of 'rights,' five, this exchange of search rights for leases continues at intervals not greater than eighteen months, until the whole area is under lease. On the other hand, the applicant may lease the whole at one time if desired. Should he not have taken out all five 'rights to search,' a new applicant can take up the remainder, and the latter's 'rights' are convertible into leases after those of the earlier applicant have been used up. It thus requires seven and one-half years to fill out an area with leases, provided advantage is taken of the maximum time limit in each of the five cases.

The cost of a 'right to search' is \$30, or \$15 for the area. This is a fixed cost, and no additional payment is required in the course of conversion into leases, except the lease price. Leases cost \$50 per square mile for the first year and \$30 per square mile thereafter. The lease runs for twenty years, but is subject to three renewals, so that an operator may control iron lands from the Crown consecutively for eighty years.

II.—DESCRIPTION OF DISTRICTS.

NICTAUX-TORBROOK BASIN.

This, in many ways the most important of the iron districts of the province, has been in part described recently (Fletcher, H.—Geol. Survey Canada, Summary Report

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for 1904); and to this the inquirer is directed for a map of the district, pending the issue of the final report by the Mines Branch.

The 'basin' is structurally either a large syncline or a succession of smaller folds, the axes of which run approximately N. 55° E. to N. 60° E. The eastern extremity of the ore-bearing portion, as far as known at present, is between Saunders brook and Fales river in the western part of King's county. Westward the ore-bearing horizons run for seven miles until, west of Nictaux river, they are cut off by a long tongue of granite which projects from the main mass to the south, northward beyond the zone occupied by the iron beds. Beyond this granite tongue, which is a mile broad, the iron-bearing beds again run a short distance westward toward Annapolis, being permanently cut off near Paradise river by a northward projection of granite. This area, however, is small and has but a few isolated pits, and little is known of its iron contents.

The general arrangement of the iron ore in the main basin may be seen by reference to the map aforementioned. It is possible here only to call attention to a few characteristics of the ore, the information being fragmentary and merely such as may be of immediate interest.

The iron ore is interstratified, having replaced limestone beds. The Leckie bed, at the Leckie mine pinches out toward the west, and also in depth. This has been referred to locally and in literature as a fault—the 'flat break.' There is no fault. The foot-wall swings south against the hanging wall, which increases its dip somewhat. The whole resumes below its normal dip of 65° S.E., but the walls do not reopen to hold ore. This is a characteristic structure in the region, being merely an exaggeration of the 'roll' structure found farther west, and is important in any judgment of the mining possibilities there.

The ore in the Leckie mine, now closed down, has been regarded as irretrievably lost. This, however, may not be the case. A cross-cut and bore holes south from No. 3 level in this mine seem to indicate a syncline, with its axis 90 feet south of the Leckie bed. Traverses of the streams which give transverse sections of the basin, although not as yet plotted in full, indicate a possibility that there are a number of subordinate folds, instead of one large and very deep syncline.

The bearing of this upon the probable occurrence of ore in the basin is very direct. In the first place, the Leckie ore is thus likely to be found at the bottom of the northernmost syncline, perhaps in a thick trough. Secondly, the two important ore beds—the Leckie and Shell veins—instead of outcropping once on either side of the basin, may be brought to the surface in the valley of Torbrook river several times, but covered by drift and alluvium; and will nowhere be so deep as would be the case in a single large fold.

The main workings at present are at the Wheelock mine, on the Fletcher Wheelock property, and close to the Nictaux-Torbrook road. A railroad now connects this mine with Wilmot. The shaft is on the slope of the Shell vein, here a brown magnetite. The Leckie bed to the north is opened by a cross-cut, but not worked. A very characteristic structure is the rolling of the ore, the pitch of the roll being approximately 12° E. The thickness varies from six feet in places where the dip is regular, to eighteen or more on the rolls. These rolls may explain the great apparent increase of thickness in some of the published and unpublished sections of drill holes in this basin.

The Wheelock mine is evidently to be the centre of activity for some time, and is capable of being developed into an output of several hundred tons per day. At present the Annapolis Iron Company, which has recently purchased the property, is shipping about 150 tons per day to the furnace at Londonderry. The iron content averages well up in the forties at the present time.

Prospecting west from this mine, in part recently done in connection with this investigation, shows that, although the ground is slightly faulted, perhaps the best ore in the basin lies here. The zone covered by this would extend from the Wheelock

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mine west to the Bloomington road. All this is practically virgin territory. West of here the ore deteriorates downward, losing iron and gaining in lime rapidly within a few feet of the surface.

Of the south side of the basin little that is new can be said at present. The ore is almost entirely a black magnetite, largely too siliceous for economical use, except perhaps under such peculiar conditions as attend the smelting at Londonderry, where ankerite is used as a flux.

The Torbrook-Nictaux basin is at present the most promising iron field in Nova Scotia. Its country is open, transportation is easy, a fair water-power is accessible in Nictaux river on the west, and an abundance of hardwood timber grows within reach by rail some miles to the south. It needs, however, a thorough and systematic prospecting, of a kind which it has not yet received. There is no other deposit in the province in which the diamond drill could be used to such advantage.

Much of the ore is magnetic, and a magnetometric survey would benefit the district greatly. The dips of the rocks are high and the iron ore occurs in narrow beds instead of lodes; and the glacial drift is in places deep. Nevertheless the topography is not adverse to magnetic surveying, and an ordinary dip needle has been able during the field work to aid considerably in locating beds. I would respectfully recommend this as a field for future magnetometric study, as yielding probably an unusually large amount of information by this means.

In trailing the iron beds of the region by means of 'float,' it is well to remember that, while the glacial ice came first from the north, there was at the last a strong movement from the south; and here and at Clementsvalle the dominant transportation was from that direction, so that 'float' lies to the north of the outcrops.

Nictaux river would furnish a few hundred horse-power, with proper storage; enough to run a fair-sized mine. In the country to the south is much hardwood, chiefly owned by one of the large lumber companies. There is no wood on the property.

CLEMENTSVALE.

From a point slightly west of Annapolis, westward to another southeast of Digby, and about four miles west of Bear river, a small basin of fossiliferous rocks extends, similar in age and character to part of the Torbrook-Nictaux area. Iron ore occurs in at least one place, as a stratified bed of fossiliferous magnetite precisely similar to the ore on the Ward property west of Torbrook. This bed is cut by an open trench on the west side of the road from Clementsport to Clementsvalle, and a few hundred yards north of the east-west highway through Clementsvalle. In the first half of the last century a small smelter at Clementsport was fed with this ore, and produced some high-grade iron. The open cut has been so long in disuse that a fresh face of the ore is difficult to get.

On the west the country is swampy, and the vein has not been traced. It is said to cross Deep brook, but has not been opened. On the east of the cut the ground rises somewhat and the surface drift is thin. It should be possible to trace the vein in this direction with little difficulty.

Ores of this type have greater continuity than those of any other represented in the province; and as the structural horizons which hold the Clementsvalle bed are themselves apparently continuous for a considerable distance, there is possibility of finding the iron ore for some miles east and west, making by itself a mining proposition of no mean size.

This is another instance in which the magnetometer would be of great service.

NORTH MOUNTAIN.

The North Mountain range runs from Blomidon on the east, along the north side of the Cornwallis and Annapolis valleys and St. Mary's basin, to Brier island on the west.

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Iron ore is found more or less throughout this distance, in isolated situations in the volcanic trap. The ore is chiefly magnetite, in the form of stringer veins and pockets, often associated with minerals characteristic of the gas cavities in the lava. It is sometimes of high-grade, and free from phosphorus and titanium. But the amount in any one pocket is not likely to be large, and there is no encouragement to mine it, except as bounties and a western smelter may possibly offer inducements at some future time. There has been nothing in the history of the trap to segregate the iron into large, well-defined bodies; so that it is separated into many masses ranging from a few tons to perhaps a few thousand.

Most of the localities are between Digby Gut and Brier island.

WINDSOR TO TRURO.

In several parts of Hants county occur what appear to be isolated pocket deposits, in part hematite, in part 'bottle' and other forms of limonite. Some of these have been exploited in past years, but all have been long idle, and accurate information about them is difficult to get. They occur chiefly in the Devonian, near the contact of the lower Carboniferous; and are the first or most westerly representatives of a type of deposits that extend intermittently for many miles eastward, in Hants, Colchester, Pictou, Antigonish and Guysboro counties. As a whole these deposits are most exasperating, often being good to the extent of a few thousand tons, but stopping short when most wanted. The history of Brookfield and of the Pictou county ores is proof, however, that there are occurrences of large size and good value. In the whole extent mentioned, a great amount of iron ore occurs in these contact deposits; and their value depends upon their size, and upon the encouragement to mine them.

In the country under consideration, the following is a list of the chief localities: Clifton, southwest of the village of Old Barns (see Truro sheet No. 57, of the geological series of the Geol. Surv. Can.); Selman, southeast of the village (Noel sheet 64); the shore east of Cambridge (Walton sheet 74); and much of the country along the contact, from five to eight miles southeast of Cambridge, especially the Goshen, Lantz and Tomlinson mines. These last are in a district chiefly characterized by manganese, and are heavily manganiferous.

BROOKFIELD.

This is another of the contact deposits, upon which considerable work has been done, in earlier years by the Nova Scotia Steel Company, and of late by contract, the ore being shipped to Londonderry.

The ore is a limonite, in part 'bottle ore.' It is to be found within a short but varying distance of the contact between the Devonian and the lower Carboniferous, lying in the former. The contact is sinuous; and from the distribution of the ore, it appears that the latter, while associated in a general way with the contact, follows a certain zone of beds which run east and west. Thus it should be met for several miles to the east, as the contact follows this direction for three or four miles. Indeed, drift iron ore is traceable throughout this distance, although the bedrock has not been prospected with any degree of diligence.

The ore lies in irregular veins and chambers, and in at least one instance as a direct replacement of a limestone bed. Its grade, as shipped at present, is well up in the forties.

THE COBEQUID RANGE.

The iron ore on the north side of Minas basin occurs under three widely different conditions: (1) in a long, narrow zone in the Devonian, in a general way following the contact with the lower Carboniferous on the south but not intimately associated

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with it; (2) in various other parts of the Devonian, apparently having no connection with contacts of any kind; (3) in the Triassic trap close to the basin.

Of the last named, the only good example noted is on Gerrish Mountain, one-half mile west of the Lower Economy post office (see Five Islands and Tenny Cape, sheet 76). The ore is a segregation in the trap, in the form of magnetite, partly massive or crystalline, part specular. The amount of dump shows the pocket to be a large one; but, like the similar ones of the North Mountain range, it is isolated.

Many cases occur, of iron ore in the Devonian rocks which lie on the south flank of the Cobequid granites and syenites, and unassociated with any special structural feature of large size. The westernmost ones are almost at the extreme westward end of the range, in a brook emptying into Advocate bay (see Apple River sheet Nos. 100 and 101). From here eastward detached occurrences may be noted clear into Pictou county. They are largely specular hematite, in part hydrous, so that their powder is brown. None of them have as yet shown promise of permanence, and in general they are mere stringers, like those in the pre-Cambrian of central Cape Breton, to be described later.

A few instances are to be met, of small deposits near, if not associated with, the contact of the Devonian and the lower Carboniferous limestone or Windsor series. Two localities are north of Partridge island, and southwest of Clark Head (see Parrsboro sheet 83).

The ore associated with Carboniferous conglomerate is first found on the west at East River of Five Islands, near where the Carboniferous itself ends, and close to the contact on the northern side of the latter. This conglomerate formation extends thence eastward across the Economy River sheet No. 76, the Londonderry sheet No. 63, and into the Earltown sheet No. 58, stopping south of McKenzie Settlement. East of this are isolated patches only. The total length of this formation between the two points named is 42 miles.

As far east as West Branch of Big Bass river, the strip of Devonian between the Carboniferous and the igneous rocks of the Cobequids is but a fraction of a mile broad, and few occurrences of iron ore are to be noted. Thence eastward, however, for many miles, the conditions are more favourable for iron ore; and from a short distance east of Portapique river to DeBert river, it is known in considerable quantities. The Londonderry Iron and Mining Company owns or controls a large part of this territory; but there is ground west of the former river and east of the latter, in which iron ore should be found under the same circumstances as those at and near Acadia mines and East mines, the two centres of activity on this range. This condition of occurrence is mentioned because of the aid it may furnish in exploration.

The distance from the contact of the zone carrying the iron ore varies widely. This is because the contact is sinuous while the ore follows somewhat closely a certain set of beds. These are in part siliceous, but chiefly limestones; and all the evidence points to limestone as the ultimate seat of the ore deposition. The ore-bearing zone is usually most easily followed along the hills, disappearing at the brooks which cut across the rocks.

The ore is chiefly in the form of limonite, specular or massive or earthy in different parts. A small amount of 'bottle ore' occurs, and in one place a considerable deposit of earthy red hematite of high grade. In addition to these siderite (carbonate of iron) occurs in places, especially at East mine; and ankerite (a carbonate which is half lime, and half iron and magnesia). In many instances where there is no limonite, ankerite is found; and it is only a question of favourable opportunity, whether it has or has not been converted into the former. Thus the presence of this ankerite is regarded, from here eastward into Pictou county, as a favourable indication. It looks at times so much like the carbonate ore, or spathic iron, that it may be difficult to tell the two apart. The spathic ore seems not to occur much by itself.

Whether the greater development of mining in the central part of the region is due to wider and better ore there, is by no means certain, but is probable. The con-

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ditions favouring the deposition of the iron seem to have been more or less limited on the east and west, and would be naturally better near the centre of the country affected.

But the presence of the ore depends, not alone or even especially upon the proximity of this contact, but upon (1) favourable strata, and (2) certain ruptures which occurred in the strata during the formation of the Cobequid mountains. Wherever these two factors are in conjunction, the chances for finding iron ore are good. It may be well to note in this connection, that ankerite and associated ore occur to the eastward in Pictou county, at and near the contact of two formations within the Devonian, and far from either intrusives of Carboniferous strata. These occurrences have not yet been shown to be connected.

The ore zone is trailed along the hills east and west by the character of the soil, and by the 'float' of ankerite or of iron ore. In the cross brooks, the presence of the proper rock zone can often be detected, where neither ankerite nor iron ore is present, by the decomposed and shattered condition of the rock, and the character of staining. In some places, as the section in Folly river, ankerite in abundance is found in the brook beds.

Several of the streams in the south side of the Cobequids have considerable power at times; but the best of them are rivulets in the dry season, and none have good natural storage. The ranger of the Londonderry Iron and Mining Company states that on the company's property, which does not comprise by any means all of the mountain crest, are 18,000 to 20,000 acres of good timber, about 40 per cent hardwood, chiefly beach, birch and maple.

The company, which thoroughly altered the smelter four years ago, makes an exceedingly good grade of pig iron, the ores used being the Londonderry limonite, Torbrook hematite, an occasional lot from Brookfield, and siderite and ankerite. The last serves also as flux, being all that is employed; and its iron contents enable the use of a lower grade of ore than would be possible with a limestone flux. On account also of this flux, it is feasible to use a high silica iron ore upon occasion. The Londonderry ores are not high in phosphorus, while those from Torbrook are. Sulphur may be troublesome in the former, and in certain openings, as those at Cook's brook, it has become too plentiful with depth, vitiating the ores.

The concentration of the ores in the Londonderry zone seems to depend more closely upon present topography than in any of the districts mentioned earlier. The ores grow rapidly lean downward, iron being replaced by ankerite generally, very little below the level of the deeper brook valleys; and these deposits must depend for their life upon their great surface extent east and west, rather than upon any permanence in depth.

ARISAIG.

This is a district, like Torbrook and Londonderry, of considerable extent. It is situated in Antigonish county, northwest of the town of that name and directly on the sea coast (see Cape George sheet 33, and Antigonish sheet 34). The ore-bearing ground as now known extends from one-fourth of a mile west of the Antigonish-Malignant Cove road on the east, to Arisaig pier on the west, a distance of 5.5 miles.

The ores are of three classes: (1) discontinuous and indefinite hematite veins in igneous rocks; (2) bedded hematite in rocks of Silurian age; (3) ore bodies, chiefly hematite and bedded, in rocks of greater age and occupying the high country to the south. Of the last, a few occurrences are of veins similar to the rest but traversing the strata slightly, and one is a black and feebly magnetic ore.

The country is made up of strata striking northeast to east, and dipping nearly vertically. The younger of the two rock series, occupying the region from the shore for a half-mile inland, contains little ore so far as known, and away from the shore has no intrusions except at the eastern end, near Malignant cove. The older series is

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injected, particularly toward the east, with many masses of igneous rock, which have in places seriously interfered with the continuity of the iron ores.

The intrusions show here and there small deposits of hematite, containing a few hundred or possibly a few thousand tons. Their lines are irregular, and their continuity has not been shown to be great in any case thus far. Two such pits are opened a quarter of a mile from the shore, on the farm of John B. McNeil, the ore being visibly very siliceous near the margins.

The second type of ore occurrence finds representatives in the 'Trunk Road mine,' and a cut on Ross brook to the east. These are a quarter of a mile from the sea, nearly opposite Arisaig pier, and were worked slightly by the Nova Scotia Steel Company before their acquisition of Bell island, Newfoundland. The ore is a bedded hematite, replacing a limestone and with some fossils. The two openings on opposite sides of the 'Trunk Road' give two feet of good ore. On Ross brook, a few hundred yards east of the other, is a cut in similar ore, the bed being perpendicular in both cases. The two are nearly on the same range, and it is possible that they are the same. Ore of this character should 'carry' for a considerable distance on the strike; and although these are the only occurrences known in the Silurian strata, it might be because there has been no systematic prospecting for more. What has been discovered thus far is too thin to work by itself.

The remaining class constitutes the really important portion of the field. The ore is in bed-like bodies, in most cases at least, parallel with the stratification. The dips are both south and north, but prevailing the latter; and change in the same bed in the vertical sections exposed by cuttings on the mountain side. In one of the cuts on the hillside west of the first or east branch of Doctor's brook, an anticlinal folding is distinctly visible, the iron ore itself going across from one side of the saddle to the other. If this were discovered to be more than a local corrugation, its importance would be great; for the beds should then be duplicated in a north-south traverse. But there is as yet no evidence that such is the case.

The easternmost openings of the main part of the district are on the property of Duncan McKenzie, 3,200 feet east of the east branch of Doctor's brook. At least two 'leads' crop out here. The ore is all siliceous, some parts more than others. The beds should be continuous for some distance, but the country around is invaded by many intrusions, large and small.

The next exposures and cuts to the west are on the two sides of the east branch of Doctor's brook. The ground here, or immediately to the west, has been faulted, and it is impossible to match the ore beds with those on the next brook west. Five pits are opened on the east side, on at least three beds, and six pits on the west on at least four beds. Most of the iron runs very high in silica, if one may judge by its appearance.

One pit has recently been opened not quite halfway between Doctor's brook and Iron brook on the west, showing four feet of fair ore, clean and less siliceous than in the openings to the east.

The next cuts are on Iron brook, the branch of Doctor's brook next west. The distance between the two brooks is 2,000 feet, and that in which no ore has been opened, 1,000 feet. None of the beds here can be correlated with those east; on the other hand, similarity of ore, especially in two of the bodies, leads to the conclusion that the beds are continuous from here west for at least 5,400 feet.

One of the two, so different from all the others as to be easy of distinction, is the Tunnel lead. It is not met east of Iron brook, but was worked in a small way by contract for the Nova Scotia Steel Company in the country between this and McInnes' brook on the west, and opened on the west bank of the latter. Beyond this it has been cut in at least two places, the westernmost being on the property of John McPherson. The ore is 'oölitic,' the particles being moreover segregated into pebble-like form, the matrix between being slate or a massive fine-grained hematite. The whole is locally called 'kidney ore,' but is entirely unlike the variety of limonite

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which is everywhere given that name. On Iron brook it is so stringy and impure as to be unworkable.

The ore is still very siliceous, quartz grains being visible in some of the openings. The two southern openings, one on either side of the brook, show some fair ore, mixed, however, with poor. The better of the two, on the east side, is 15 feet wide, with a parting of one foot of slate five feet from the north wall.

The ground here has been somewhat faulted, but not to such extent as to displace the leads far.

A number of pits have been sunk between Iron and McInnes' brook, especially in the western half; and a combined open cut and tunnel on the 'Tunnel lead' for 1,100 feet represents the only serious attempt at working these deposits. In this ground three more leads are very persistent. Besides these there are probably two more. The southernmost bed is extremely high in silica wherever seen. The 'Tunnel lead' runs from three and a half to six feet. The workings are so shallow that a tunnel driven from McInnes' brook would leave much ore still overhead. The other lead is coarsely oölitic and rather siliceous. The pits near the east branch of McInnes' brook, which may prove to be on additional leads, show too little to be of aid in determining their availability.

A short interval of unprospected ground separates the two branches of McInnes' brook. On the west side of the west branch, six openings exhibit four beds, the northernmost being the 'Tunnel lead,' opened for a few feet in prospecting by the Nova Scotia Steel Company. The southernmost is probably the coarse siliceous lead already referred to and is much like the eastern occurrences. The former gives five to six feet of ore here, between irregular walls. The lead has been pinched and somewhat faulted, but comes in again on the west of the disturbance. The other leads are moderately siliceous and show some sulphur, being the first ones thus characterized. One of them gives eight feet of ore.

The next openings west are on Gillis' brook, a few hundred feet west of the last, but 2,000 feet north. Here are two leads, too irregular in contact to regard as well established. The ore itself is fair, but not much is exposed at present. The presence of the leads is important, however, as showing that there are deposits far to the north of the main lines, and indicating the possibility of still others between.

The next opening west is 2,900 feet west of the west branch of McInnes' brook, on the farm of Dan Macdonald. The ore is black, feebly magnetic, and very siliceous.

On the two adjoining farms west, Alex. McDonald's and John McPherson's, are several recent openings, showing ore which on the whole promises to be less siliceous than that farther east. The 'Tunnel lead' is cut here, badly crushed and pinched; but this may be due to one of the local disturbances which characterise the region. Another of the pits shows 4 feet of moderately good ore, grading southward into 2 feet 4 inches of very siliceous iron ore. Another shows 4 feet of fair ore on the north, the north wall not being cut; and a 2-foot rock parting succeeded by 2 feet 4 inches of poor ore on the south. Another cut shows four feet of good oölitic ore, not siliceous in any part. Since the end of the field season, some new pits are said to have uncovered more ore, one 500 feet south of any previously opened. Opportunity has not yet been found to visit these new pits.

The Arisaig district has been treated in greater detail than the others, first because it is a large field, which has never received much attention in print, as have Torbrook and Londonderry; second because extravagant claims have been made for it, by many interested parties, and counter statements circulated that it is worthless. Both notions are extreme, as the following summary will show.

The leads throughout are nearly vertical, and the structure of the country indicates that they or the strata which they replace, will not blanket for a great depth. Their character makes it highly probable that at least in some instances, they are continuous for a great length on the strike; and they should be found a considerable distance west of the McPherson property. It is to be regretted that no drilling has

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been done in the district, for that would give direct knowledge as to the depth to which the ore may go. As it is, there is a total vertical section of between 300 and 350 feet, from the hill-top exposures to those in the lowest brooks; and the iron shows no change whatever, which might be due to topography. This question of depth should be proved at the earliest opportunity.

The western part of the field is better on the whole than the eastern, being freer from faulting and influence of trap intrusions, and the ore containing less silica. All the iron ore is moderately low-grade, probably never averaging above the forties in car-load lots. Some phosphorus may be expected. The field is a large one; and while there are parts which are hardly worth developing in the present condition of the iron industry, there are other portions which should yield enough to make a large and valuable proposition.

The real number of veins or beds uncovered is still problematical. On East Branch there are four, probably five, and the 'Tunnel lead' is not present. On Iron brook there are at least four. Between this and McInnes' brook there are four, probably six, one of these being north of the 'Tunnel lead.' The sections west of McInnes' brook show four at the south, and two on Gillis' brook; and the westernmost cuts show three, probably four. Of these, two at least should be workable at the west, and very likely a third. In tracing ore by 'float,' it is necessary to remember that the ice motion was from the south.

The exploring done thus far has proved singularly little for the time and money spent. A property of this size and importance is not a plaything and should not be taken up by men who will not, or cannot, do proper development work on it to prove its character, merely on the gambling chance of finding a purchaser who will pay the price of a mine for a prospect. A few thousand dollars well spent would prove beyond contradiction a minimum value which could then honestly be placed upon it. For thorough exploration, the proposing purchaser would even then be obliged to use a large force of men and spend a considerable amount of money. Mining itself should be moderately cheap and easy for a long time, because of the possibility of using tunnels and adits, avoiding pumping and hoisting.

Railway communication could be made with Antigonish on the south, or with Merigomish on the west; and survey has long since been made for this. Water shipping would be attended with some difficulties, as there is no harbour, and the gulf coast is very exposed. A breakwater-pier has been built at Arisaig, and some sort of shelter could be made, adequate to the protection of ore steamers. But experience thus far shows a strong tendency along this coast for protected areas to silt up, and at the present pier this has already progressed somewhat.

A considerable power could be had by proper storage of Doctor's brook, the dam being built well down toward the shore road; but it was impossible to get a fair measurement during the dry season, owing to the great shrinkage in the stream.

There is said to be a large amount of hardwood some miles to the south, but on the properties within the iron district, and for a considerable distance away, what hardwood there is is small and poor. Enough wood could be got for the few timbers required in running here, but none for possible electric smelting unless from some miles.

WHYCOCOMAGH.

The iron ores of Whycocomagh, Cape Breton, occur under rather diverse conditions. Those which have attracted most attention are located on the Craignish hills, chiefly not far up the side of Skye mountain and on its eastern end, near the shore at the head of St. Patrick's channel.

The rocks of this area, marked on the geological sheets as the George River Limestone series of the pre-Cambrian (see Whycocomagh sheet 15), are in part altered sediments, quartzites and schists especially. At the old iron ore openings on the

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Drummond areas, they are the former. The ore, here a magnetic hematite, occurs scattered over a considerable distance up and down a small brook. It does not replace any special stratum, is not bedded in form, nor does it follow any distinct line of fracturing in the rock. It appears, on the other hand, to be an irregular impregnation, which may yield a large tonnage, but is always uncertain. The appearance indicates that, properly followed, it should turn out a considerable amount of ore; but there is no evidence in it of stability of form or dimension. Thus its mining would probably be attended with some uncertainty. Nevertheless, like some other deposits on the same mountain, it belongs to the class which with proper encouragement, should be able to offer moderate quantities of ore at some central smelter.

On the same mountain are a number of other openings, mostly old, some hematite and some magnetite, and with a variety of shapes and surroundings. One or two look fair in quality, and their even contacts indicate possibility of permanence.

North of the village of Whycomagh are several occurrences of magnetite, chiefly in impure magnesian limestone of the George River series. They would not merit more than passing notice, had not they been used for the purpose of exploitation, in a manner which their value by no means warrants. In one instance 45 feet of ore was alleged, or implied, whereas a foot or fourteen inches would be a magnificent allowance for all that could be measured up, and this was visible for some ten feet. The country-rock is full of iron-bearing silicate minerals, from the alteration of which the iron was derived. Even were iron ore present in some bulk, under such conditions it would be ruinously high in silica. There is no regular iron ore formation north of Whycomagh, as far as discovered.

Five miles east of Whycomagh is Logan's brook. From a half-mile to a mile up this from the shore road are several occurrences of specular hematite of a high grade. This is another case of undue prominence being given to minute objects. The ore impregnates sandstones and conglomerates of lower Carboniferous age. At various times the daily and mining press have received and disbursed statements to the effect that a three and one-half-foot vein of pure hematite had been discovered in Logan's glen. Were this correct, and the vein permanent, it would be well worth exploitation. What one actually finds is a lot of stringers which occasionally but rarely give twelve inches of ore in any one piece, penetrating the rock for a few feet, and showing no sign whatever of permanency. There are two openings in or near the glen, of this character. They may lead to something, but they give no indication of it now, and have absolutely no features upon which one could legitimately base a high selling price or a system of stock exploitation. I make especial mention of this instance because it is unusually flagrant, and because the country has too many similar cases for its economic good.

A number of reputed finds of iron ore in the pre-Cambrian and Carboniferous rocks, all the way from Middle river on the east, to Lake Ainslee on the northwest, were looked into; but in no instance was more than a filament of specular hematite found.

Aside from some of the ore of Skye mountain, none of the iron of Whycomagh at present shows probability of economic value or quantity.

BOISDALE BARACHOIS.

Near the station of Barachois, a few miles west of Sydney, Cape Breton, some promising iron ores occur under several conditions. The district lies opposite the southern end of Long island, on the east side of St. Andrews' channel (Sydney sheet 134). There are three sets of deposits, two of which are of workable size, at least to the extent of shipping in some quantity to the smelters at Sydney and Sydney Mines.

On the crest of the Boisdale hills, 700 feet above the lakes and on the areas leased by Mr. McPherson, of Little Bras d'Or, occurs a large amount of pre-Cambrian magnesian limestone. In this is a dense magnetite, part of good grade, and extending

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intermittently from a short distance southwest of the mountain road from Barachois to George's river, northeast for a mile. At and near the road it is of good quality; further northeast it contains a large amount of sulphur, and its surroundings include granite and trap as well as limestone. The largest openings do not show any degree of definiteness of shape to the ore bodies, but the ore appears to have segregated into a somewhat decomposed and fissured zone. The quantity obtainable in any one body has not been determined, as work has not yet progressed sufficiently, but it will run from a few hundred to a few thousand tons.

From here southwest for a long distance, ore has been found in spots, and the district is evidently one in which there is much ore localized into discontinuous bodies of various dimensions, situated roughly along the line of greatest strain made during the uplift of the mountains. The difficulty in working these is the same as encountered in contact deposits—cost of prospecting and uncertainty of life of the individual deposit. Nevertheless, many such will pay well in a small way, to sell under contract to smelters.

The second class of deposits is situated near the shore, on the crest and west side of a ridge between it and McLeod's brook on the east. The pits are opened on rocks of lower Carboniferous age, located on areas leased by Sheriff Ingraham, of Sydney. From one pit a shipment of 500 tons was made to Sydney, being discontinued through no fault of the ore. The ore here was 12 feet across, almost without rock. The ore is hematite, largely specular, and often of very good grade. It does not follow any well-defined course, but as a whole strikes slightly east of north. The margins are ragged, showing lack of the best kind of localization. Where limestone is the wall rock, as in several pits, much of the ore is spathic. There is opportunity here for a considerable shipment of ore, the chief problem being the size and continuity of the bodies.

The third class includes some small occurrences of hematite in Cambrian strata on the shore and on the west side of Long island, of no economic value.

* * * * *

The above summary report, dealing as it does with a large variety of ores, will serve to enforce the following points which may be of service in connection with reported iron ore properties in the province.

1. Iron ore is an ore which, whatever its origin, will decrease in value downward after a certain distance is passed, and will prove shallow in most instances compared with ores of the precious metals. Many of the owners and lessees of areas appear to think that it should extend downward indefinitely.

(2) Among the conditions under which iron may be sufficiently localized to give large and stable ore-bodies, are the following:—

(a) Replacement of strata, as limestone or siliceous beds.

(b) Concentration along well developed and closely confined zones of fracture of considerable depth and length.

(c) Contact deposits between unconformable series of strata, where such location is a zone of weakness.

(d) Contact deposits between intrusions and country rock, which are rare.

(e) Fault deposits.

(f) Deposits along contacts between faults and easily replaced strata, like limestones, or between dikes and favourable strata: a common condition in the Lake Superior district.

These are not all, but the chief, modes of occurrences. It will be readily seen which of these are most likely to yield large and well defined ore bodies, and which are exhibited in any particular district in the province when the ground is looked over in person.

Much annoying loss of money and time would be saved if those who are asked to invest in iron ore properties would remember that, while iron oxides are almost universally distributed and veins of them are countless, no iron will be found in com-

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mercial quantities except as segregated and concentrated by the aid of especially favourable conditions.

Respectfully,

J. EDMUND WOODMAN.

DALHOUSIE UNIVERSITY,

HALIFAX, N.S., February 22, 1907.

REPORT OF MR. EINAR LINDEMAN.

OTTAWA, March 27, 1907.

DR. EUGENE HAANEL,
Superintendent of Mines,
Department of the Interior,
Ottawa.

I.—BLACK LAKE IRON ORE DEPOSITS.

SIR,—In accordance with your instructions, I left Ottawa on May 17 last, for Bedford to make a magnetic survey of the Black Lake iron ore deposit.

The property is located on lots 7 and 8, concession IV., township of Bedford, and, according to Mr. Bawden, of Kingston, was leased some years ago to the Bethlehem Mining Company, which did some prospecting work. The rock formation of the property consists of red gneiss, limestone and a dark green amphibolite in which the ore occurs. The strike is about N.E.-S.W., and the dip 45° - 50° towards S.E.

A base line was cut out on the west side of Black lake, and from this line cross lines were run at right angles every 30 feet, dividing the field into squares 30 feet on the side. At each corner of these squares magnetic observations were taken, both of the horizontal and vertical intensity.

Occurrences of magnetite were observed at three different places and here, on account of the irregularity of the magnetic strength of the ore, readings were taken for every fifteen feet.

Deposit No. 1 occurs on a small peninsula at the south end of Black lake. Some small cuts have been made here and the faces of these show a dark green hornblende rock with impregnations of magnetite and calcite. The magnetic curves show that the deposit is of very small extent. Both east and west of this occurrence outcrops of limestone are visible.

Deposit No. 2 occurs on an island close to the west shore of the lake. An open cut has been dug here and some 'ore' is said to have been taken out. Pyrite is plentifully distributed through the formation and the decomposition of the pyrite gives the rock a rusty and rotted appearance. On the west side of the island outcrops of limestone were observed.

Deposit No. 3 occurs on another island about 900 feet N.E. of deposit No. 2, and is of the same nature as the two former. The rock is, however, not so much altered and has a more dense structure.

As my personal opinion of the deposits at Black lake, I beg to say that they are of very small dimensions, are high in sulphur, of irregular shape, in some places the ore occurs only as slight impregnations in the country rock, and are, therefore, at the present time of no commercial value.

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II.—MAGNETIC SURVEY OF THE COUNTRY EAST OF THIRTY ISLANDS LAKE, THIRTEEN ISLANDS LAKE, BLACK LAKE, NORWAY LAKE, AND FURTHER IN A N.E. DIRECTION.

Having finished my work at Black lake, I was instructed to make a magnetic investigation of the country east of Thirty Islands lake, Thirteen Islands lake, Black lake, Norway lake, and further in a N.E. direction. For this purpose a base line was cut out from the line between lots 1 and 2, concession II., in a northeasterly direction up to Pond Lily lake, and cross lines were run at right angles for every 300 feet. Magnetic observations were taken on these lines for every 60 feet. Some strong magnetic readings were observed on lots 2, 3, 4 and 5, concession III., and lot 5, concession IV., but when more closely examined were found to be very irregular. On lot 3, concession III., some small test pits and strippings have been made, showing a dark hornblende rock, intermixed with some magnetite, but not of sufficient quantity to warrant mining. A diamond drill hole is said to have been bored here to a depth of 300 feet without giving any promising results.

The strong irregular magnetic readings at the other places mentioned may be due to the magnetite occurring as an accessory constituent in the basic gneiss and give, in my opinion, no promise of further discoveries of commercially valuable ore deposits in the district investigated.

III.—IRON ORE DEPOSITS AT AUSTIN-BROOK, N.B.

Recalled August 15, I left Ottawa on August 17, for Bathurst, New Brunswick, to make a magnetic survey of the iron ore deposits at Austin brook.

The ore deposits so far discovered are located on lot 12, range 17, township of Bathurst, county of Gloucester, in the province of New Brunswick, about one mile above the Grand falls, on the Nepisiquit river, and close to this river.

A wagon road from Bathurst runs up to the property, the distance from Bathurst being about twenty-one miles.

The nearest railway station is the Red Pine station on the Intercolonial railway, between Bathurst and Newcastle, the distance from the ore field being about nine miles.

The ore field was examined by the Dominion Iron and Steel Company some years ago, when some stripping was done. This work, being done during the winter, was of comparatively little value, however, and it seems no satisfactory results were obtained.

The ore, magnetite, with a considerable amount of hematite, occurs in lenses in a greenish mica schist.

The accompanying maps of the vertical magnetic intensity of the field surveyed during last fall show three separate deposits or groups of deposits, which for reference have been numbered I, II and III.

The deposit marked No. I consists of one continuous ore body. Nos. II and III each consist of a number of smaller deposits.

The general strike of the deposits is N.E.-S.W., with a dip towards N.W. at an angle of 50-60 degrees.

Group No. I.

Of the field surveyed this is the most important deposit and consists of one continuous body of ore about 2,000 feet long. This ore-body is located between Austin brook and Nepisiquit river. It was discovered last fall by Mr. W. Hussey, who southwest of Austin brook discovered the northerly end of the deposit which here crops out.

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The ore body has here an elevation of about 75 feet above the surrounding country and can easily be traced by the outcrops for some 500 feet. The width of the ore at the surface is here about 100 feet.

Further south the ore is covered by gravel, &c., of considerable depth, but the magnetic curves indicate clearly the existence of the ore. About 100 feet north of Nepisiquit river the ore was again exposed by stripping and the contact with the hanging wall located.

A sample of the ore from this place gave the following analysis:—

	Per Cent.
Silica.. . . .	31.60
Metallic iron.. . . .	42.49
Phosphorus.. . . .	1.197
Sulphur.. . . .	0.026

A general sample was taken across the whole width of the deposit about 230 feet from its northerly end.

This sample gave the following analysis:—

	Per Cent.
Silica.. . . .	26.3
Iron.. . . .	47.3
Manganese.. . . .	1.0
Phosphorus.. . . .	0.64
Sulphur.. . . .	0.05

Group No. II.

This group of deposits is located east of Austin brook. The magnetic curves show here a number of smaller deposits, of which several are of no practical value, and possibly are only big boulders.

The investigations previously referred to have been chiefly confined to this group, when some cuts were made and some stripping done.

The separate deposits have for reference been marked 1, 2, 3, &c.

Deposit No. 1 crops out in the hill slope towards Nepisiquit river. To judge from the magnetic curves, this deposit is composed of two smaller deposits, which was confirmed by stripping, the distance between the separate bodies being, however, not more than 5 feet. The width at the surface of one of these ore-bodies was 23 feet, and the other was stripped for 13 feet.

A sample from these deposits gave:—

	Per Cent.
Silica.. . . .	21.57
Iron.. . . .	45.99
Phosphorus.. . . .	1.21
Sulphur.. . . .	0.05

This deposit is, however, not likely to prove of sufficient size to warrant mining.

Some 400 feet N.W. of deposit No. 1, deposit No. 2 crops out in the valley towards Austin brook. Through stripping, the width of this deposit at the surface is shown to be 42 feet in the southerly part. The length can be estimated to be about 350 feet. It is covered by gravel to a thickness of 2-8 feet. Towards the northerly end the deposit becomes more narrow and the width at the surface is here only about 19 feet. Numerous narrow veins of quartz are also noticeable in this end of the deposit.

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A sample from the southerly end of the deposit gave the following analysis:—

	Per Cent.
Silica..	24·7
Iron..	46·6
Manganese..	1·76
Phosphorus..	1·04
Sulphur..	0·02

A sample from the northerly end gave:—

	Per Cent.
Silica..	25·21
Iron..	43·41
Phosphorus..	0·82
Sulphur..	0·02

Deposit No. 3 is located in the valley about 180 feet N.E. of deposit No. 2. No outcrops occur in this valley, but farther northeast the contact with the foot wall is shown by stripping in two different places. Numerous boulders of ore and rock indicate that this northerly part of the deposit has undergone a heavy erosion. Several outcrops of poor ore occur on the east side of the swamp close by the foot wall and are probably all that are left of the deposit here previously located.

The southerly part of the deposit is, to judge from the magnetic curves, left comparatively undisturbed.

Deposit No. 4 is located a little distance east of deposit No. 3.

This deposit has a more northerly strike and a length of about 400 feet. The width at the surface was shown to be about 30 feet, but towards the north the width is decreased.

A sample gave the following analysis:—

	Per Cent.
Silica..	33·1
Iron..	43·6
Manganese..	0·5
Phosphorus..	0·40
Sulphur..	0·007

North of groups I and II there is no indication of ore for a distance of about 1,600 feet, when group No. III is encountered. This group of deposits is, to judge from the magnetic curves, of considerable importance.

The ore is covered by gravel, &c., and only visible in a couple of small pits in the southerly part.

The total length of these ore strikes so far investigated is about 1,800 feet. The ore is, however, not continuous for this length as the magnetic curves show breaks in two places, but the total distance of these breaks does not exceed 150 feet.

This part of the field has also been subjected to a heavy erosion, clearly indicated by the numerous boulders of ore which are scattered all over the vicinity.

These loose boulders have a disturbing effect on the magnetic curves and make it hard to determine if the deposits have previously been one continuous body, which through erosion has been cut, or if they are three separate ore lenses located close to each other in the same strike. The first assumption seems to me to be the most likely, judging from the masses of ore located east of the two breaks and close to the main deposits.

The width of the ore at the surface could not be ascertained. In the two stripings done at right angles to the strike the ore was exposed in the one for 24 feet and in the other for 32 feet, but in neither was the contact with the hanging wall reached.

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A width of 60 feet at least is very probable, and some distance further north the magnetic curves indicate even a greater width, but taking into account all the loose boulders here located it will be necessary to do some further development work before this point can be ascertained.

Two samples taken gave the following analyses:—

	Per Cent.
Silica..	28.52
Iron..	44.55
Phosphorus..	0.827
Sulphur..	0.035

	Per Cent.
Silica..	22.7
Iron..	47.5
Manganese..	1.2
Phosphorus..	0.65
Sulphur..	0.054

A little distance south of these strippings the ore crops out, and a sample taken here gave:—

Silica..	7.21
Iron..	61.70
Phosphorus..	0.119
Sulphur..	0.026

West of the deposits described is located another ore strike parallel to the former and composed of three different deposits which are all covered by gravel, &c., and no stripping has been done. In size they may be compared with those described under group No. II.

COMPOSITION OF THE ORE.

The ore is very fine-grained and the contents of the silica in the ore, as shown by the analyses, are considerable, occurring partly intimately mixed with the ore, partly as thin layers following the strike, giving the ore a banded structure. A distinct contact between the ore and the country rock can, as a rule, be observed and no greater intrusions of rock in the ore were noticed.

On account of the few outcrops of the ore-bodies and the few cross-cuts made, which in several places exposed only a small part of the total width of the deposits, the analyses given above cannot be considered as an average composition of the ore, when referring to the whole ore field. If the samples could have been taken across the whole width of the deposits and over a large area the results would probably have been more favourable. This is confirmed to a certain degree by the analyses made of the cores obtained through the diamond drilling done during the last month. These show, as given below, somewhat higher iron content and less silica. The sulphur, however, proves from this to be irregularly distributed through the ore and especially close to the foot wall is considerably high.

EXPLORATION WORK.

At the end of last November the provincial government of New Brunswick sent a diamond drill up to the property, which has been in commission during the winter.

Up to the present the drilling has been confined to group I. Two holes have so far been drilled and a third is now being sunk at the south end of this deposit. Accompanying map and sketch show that hole No. I was drilled vertically on the

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hanging wall about 250 feet from the north end of the deposit. It struck the ore at a depth of 35 feet and then went through ore to a depth of 162 feet, when the foot wall was reached. The sketch shows the records of drilling and analyses. Samples were taken by me from each foot of the drill core and made up in general samples for every 10 feet.

Hole No. 2 was drilled about 700 feet from No. 1. After going through gravel, &c., it struck the ore at a depth of 49 feet and reached the foot wall at 162 feet, showing, however, 9 feet of rock at a depth of 73 feet. The analyses show the average composition of the ore to be:—

Hole I.

	Per Cent.
Iron.....	49.0
Silica.....	16.6
Phosphorus.....	0.79

Hole II.

	Per cent.
Iron.....	49.0
Silica.....	16.1
Phosphorus.....	0.74

The magnetic curves indicate clearly that the field contains large quantities of ore, and I may also state that north of group III strong attractions on the needle indicate the presence of other deposits, which could not be further investigated this year on account of the lateness of the season.

In order to fully ascertain the quality of the ore further diamond drilling will be necessary. To judge from the work done a part of the ore might, however, have to be concentrated before it would be suitable for economic smelting in blast furnaces of the present day.

The analyses have been made by Mr. H. Leverin, chemist to the Mines Branch.

Yours respectfully,

EINAR LINDEMAN,

Mining Engineer.

REPORT OF MR. H. A. LEVERIN.

OTTAWA, March 23, 1907.

DR. EUGENE HAANEL,
 Superintendent of Mines,
 Department of the Interior,
 Ottawa.

SIR,—Following is the report of my work since July 1, 1906:—

Samples analysed numbered 120, and are of the following character:

Pig iron from electric process.. . . .	30
Slag, from electric process.. . . .	36
Iron ore, complete analyses.. . . .	9
Iron ore analysed for silica, iron, phosphorus, sulphur and titanium.. . . .	19
Clay, complete analyses.. . . .	7
Limestone, complete analyses.. . . .	1
Sand, complete analyses.. . . .	1
Gypsum, complete analyses.. . . .	2
Coal.. . . .	3
Gold and platinum ores.. . . .	8
Pyrrhotite.. . . .	2
Chalcopyrite.. . . .	2
	<hr/>
	120
	<hr/>

The number of determinations made were:—

Iron.. . . .	30
Ferrous oxide.. . . .	45
Manganese.. . . .	75
Copper.. . . .	14
Nickel.. . . .	12
Gold.. . . .	8
Silver.. . . .	2
Platinum.. . . .	3
Chromium.. . . .	3
Titanium.. . . .	14
Alumina.. . . .	45
Lime.. . . .	56
Magnesia.. . . .	54
Sulphur.. . . .	98
Phosphorus.. . . .	96
Fluorine.. . . .	2
Graphitic carbon.. . . .	30
Combined carbon.. . . .	30
Silicon.. . . .	30
Silica.. . . .	72
Alkali.. . . .	4
Combined water.. . . .	7

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Volatile matter (in coal)	3
Fixed carbon (in coal)	3
Ash (in coal)	3
Total	<hr/> 739 <hr/>

I am, sir, your obedient servant,

H. A. LEVERIN,

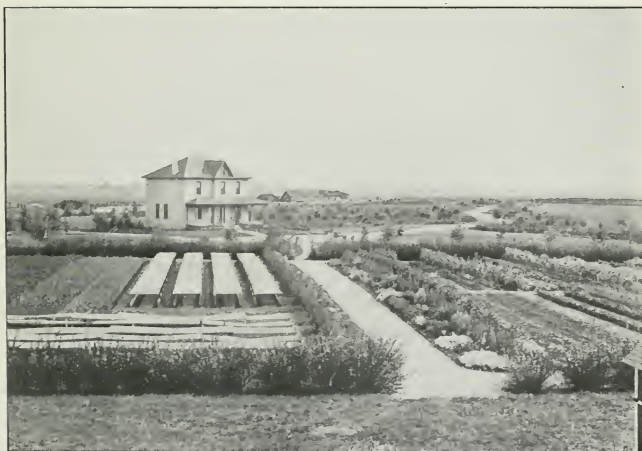
Chemist.



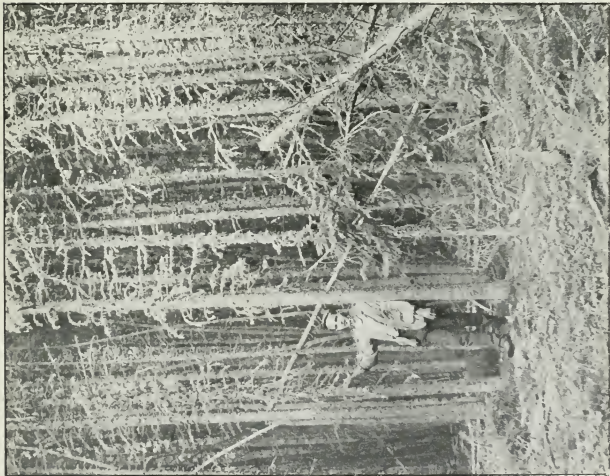
FORESTS IN THE CROWSNEST PASS.



EFFECT OF A FOREST FIRE IN THE CROWS NEST PASS.



FOREST NURSERY STATION, INDIAN HEAD, AFTER THREE YEARS OF CULTIVATION.



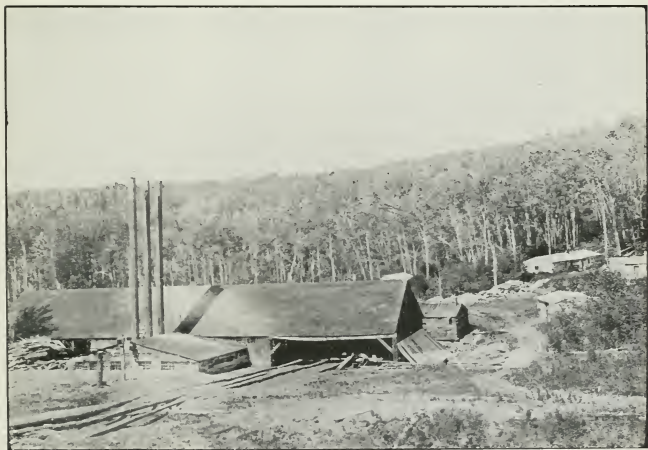
BLACK SPRUCE 80 YEARS OLD, TOO CROWDED TO GROW WELL.



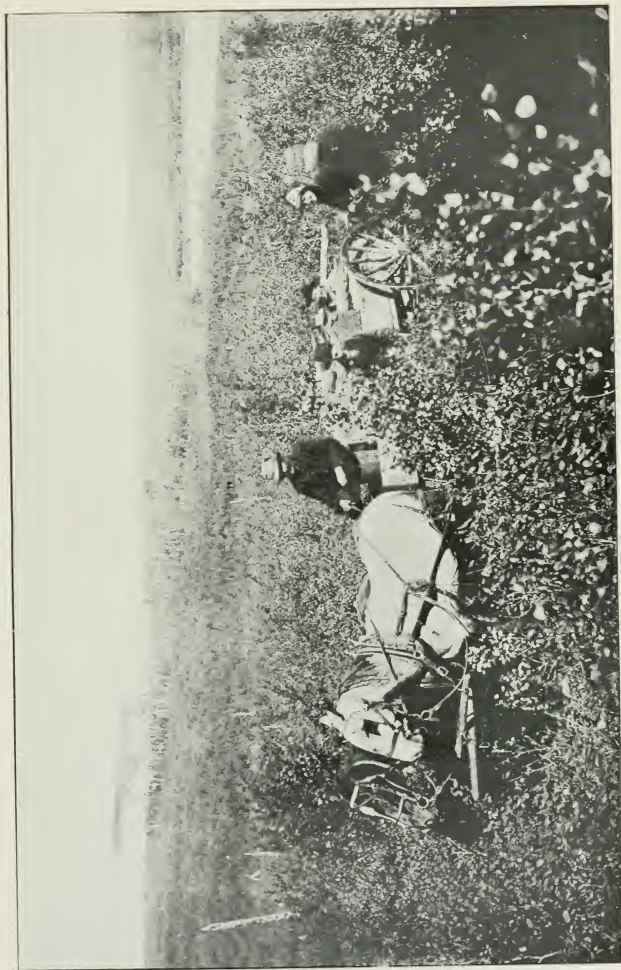
WHITE SPRUCE 28 INCHES IN DIAMETER GROWING MIXED WITH POPLAR.
RIDING MOUNTAIN FOREST RESERVE.



ASPEN AND BALM REPRODUCTION IN THE COOKING LAKE FOREST RESERVE.



J. & T. SHAW'S MILL IN THE RIDING MOUNTAIN FOREST RESERVE.



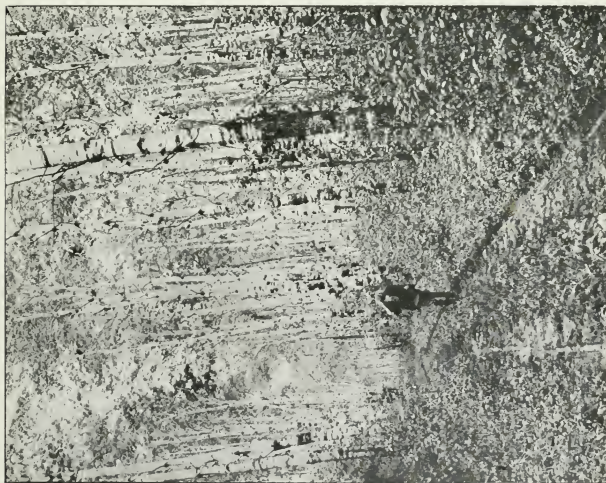
REPRODUCTION OF THE MOOSE MOUNTAIN FOREST RESERVE AFTER THE FIRE OF 1897.



TWENTY YEAR OLD REPRODUCTION OF ASPEN AND BALM OF GILEAD IN THE MOOSE MOUNTAIN FOREST RESERVE.



MEASURING THE RATE OF GROWTH OF ASPEN IN THE TURTLE MOUNTAIN FOREST RESERVE.



ASPEN FORESTS IN THE RIDING MOUNTAIN FOREST RESERVE.

PART IX
FORESTRY

FORESTRY.

REPORT OF THE SUPERINTENDENT OF FORESTRY.

DEPARTMENT OF THE INTERIOR,

OTTAWA, July 10, 1907.

W. W. CORY, Esq.,

Deputy Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the annual report on forestry and other matters under my control, accompanied by the reports of other officials in charge of special divisions. The reports presented for last year covered the work of last summer, both in fire ranging and tree planting, and consequently there is but little additional to report in regard to these services.

My appointment to the office of Superintendent of Forestry dated from March 1, last, on the resignation of Mr. E. Stewart, and, therefore, the report on forestry is mainly a review of Mr. Stewart's work. It seems a fitting occasion to sketch the development of the branch which he has initiated and organized. When Mr. Stewart assumed office in 1899, nothing had been done by the Dominion to organize a fire preventive service. To this work he first addressed himself, and developed it from year to year, till during the past season there were 52 fire rangers acting on Dominion territory, and the testimonies to the efficiency and value of the service are numerous and widespread. The co-operative tree planting scheme was begun in 1901, and since that time 8,471,092 trees have been distributed to 3,328 settlers. During the first year the distribution was 50,280, and for the present year will be 1,925,185 trees. Forest reserves aggregating an area of 3,450,720 acres have been set apart and established by statutory authority, and a timber survey has been completed on two of the reserves and is being continued on others, with the purpose of laying out scientific plans of management. This short *résumé* shows that Mr. Stewart has, in a few years, established a work of far-reaching importance to the future of the Dominion in which he may feel a just pride.

It is also regretted that Mr. Roland D. Craig, Inspector of Forest Reserves, and Mr. H. C. Wallin have resigned from the service to accept more remunerative positions elsewhere. Both were well equipped technical officers and their removal means a serious loss to the service. It emphasizes the necessity for making the government service sufficiently attractive to qualified men to insure permanency in the staff and a sustained development in policy and administration.

The office work and correspondence have largely increased as a result of the growth of the business of the branch, and it will be necessary to provide an adequate clerical staff to keep it in proper order.

The timber survey of the Riding Mountain reserve was continued during the past year, and it is hoped that the larger part of it will be completed this season, making possible the formulation of working plans for cutting the timber so as to remove only the annual product, and provide for the renewal of the forest.

By order in council of December 29, 1906, copy of which is attached, regulations were established for the cutting of timber in the Riding Mountain, Duck Mountain and Porcupine Hills reserves. These regulations, in accordance with the object for which the reserves are set apart, provide for the cutting of timber by settlers for their own use, the further restriction being made that those obtaining permits must reside within fifty miles of the reserve. The object of this latter provision is to con-

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fine the privilege of cutting timber to those who can make beneficial use of it, and to prevent, as far as possible, the obtaining of permits for purely commercial purposes. The dues provided for under these regulations are so adjusted as to encourage the removal of the dead timber and the less valuable species, and to preserve the most valuable. General regulations for all the forest reserves are now being considered.

During the past year an inspection was made of most of the forest reserves to ascertain the settlers located on them, and it is proposed to make an effort to induce them to remove therefrom so that the reserves may be kept intact and their administration made more feasible.

For the proper administration of the reserves it will be necessary to enlarge the staff and perfect the organization. Temporary fire rangers in the summer and unskilled assistance in the winter must give place to a permanent staff of qualified forest rangers if the purposes for which the reserves are established are to be properly carried out. The reserves have suffered severely from fire and must be guarded carefully. With such protection and technically qualified officers to make timber surveys and lay out working plans, the organization will be complete.

TIMBER.

The administration of the timber lands outside of the forest reserves, and of the grazing lands formerly conducted directly by myself has been placed under charge of Mr. B. L. York, under my superintendency, and his report thereon will be found under No. 23 of Part I, Dominion Lands.

The number of timber berths granted during the past year was 49, totalling an area of 410.6 square miles, and the amount received on account of bonuses was \$226,360.45, being an average of \$511 per square mile. It is satisfactory to note that recent sales of timber are yielding much larger average prices than have been received at any previous time.

The present method of disposing of timber is, however, not a satisfactory one. The department has, as a rule, little or no knowledge of the timber of which it disposes, and as the quantity now in private hands is fully adequate to meet present needs, no detrimental result would follow the holding of timber lands until government inspectors can examine and estimate the timber, so that an adequate upset price may be fixed before any berth is put up to competition.

The recent rapid development of the lumber business has largely increased the work of the timber administration, and to cope adequately with the situation will necessitate considerable strengthening of the staff generally, especially in the outside service.

The necessity for fuller knowledge of the timbered districts is emphasized continually by the experience of the department, and it would be a proper policy for the department to obtain directly more adequate information in this respect. The inquiry made by a committee of the Senate during the past session showed that the natural resources of the northern districts of the west are greater than the public had any idea of, but the evidence would be much increased in value if direct means were taken by the government to obtain information in regard to these districts, and, as a result, the administration of the timber therein could be more intelligently carried out.

The most important change in the timber regulations made during the past year was the provision for granting not more than one square mile of timber to the owners of small mills without competition at the rate of \$100 for each permit in addition to regular dues. The object of this provision was to furnish a supply of lumber to settlers in districts where it could not be obtained conveniently. It is intended to cover special circumstances where timber is specially and locally required. This provision appears to be working out satisfactorily and to be serving the object for which it was established.

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GRAZING.

The grazing regulations, established in 1903, have been sufficiently long in operation to show that they are working satisfactorily and, as the numerous applications which accumulated while the regulations were suspended have now been dealt with, it is confidently expected that no serious difficulty will be found in the further administration of the grazing lands.

IRRIGATION.

The construction of irrigation works in Southern Alberta and Saskatchewan continues steadily. The portions of the provinces referred to have been used in the past mainly for ranching purposes, operations being conducted on a large scale. With the influx of population and the necessity of feeding cattle during the winter, which was particularly emphasized during the past season, ranches are being reduced in size, and the irrigation of a few acres makes possible smaller holdings with an increase in the number of stock that can be carried. Irrigation will be found an important adjunct to the stock industry. At Raymond, in the province of Alberta, the beet sugar industry has been successful, with the assistance of irrigation. Many more profitable crops may be grown, and in regard to this, experiment is desirable.

An adequate and properly equipped agricultural experiment station could obtain a great deal of useful information in regard to the possibilities of irrigation, and the government would be fully justified in giving such a station generous support. The duty of water for different soils and crops, the crops that can be grown most profitably, the length of the irrigation season and methods of applying water, the prevention of loss by seepage and evaporation, and many other questions of great importance could be worked out experimentally at such a station.

There are some large projects under construction or operation at the present time, namely, those of the Alberta Railway and Irrigation Company, the Canadian Pacific Railway Company and the Robins Irrigation Company. By the construction of large and expensive works these projects will make available for irrigation purposes sources of water supply which could not be developed by the individual with small resources.

Irrigation will be a large and important factor in the development of this part of the west, and the staff of the irrigation office and the means at their disposal should be made sufficient to adequately investigate the water supply and the methods of its utilization and to deal with the large interests that are involved.

During the past season special attention has been given to the gauging of the streams and the inspection of projects under construction, as will be seen by the report of the Commissioner of Irrigation.

Respectfully submitted.

R. H. CAMPBELL.

APPENDIX No. 1.

CANADIAN IRRIGATION SURVEYS.

REPORT OF JOHN STEWART, D.L.S., C.E., COMMISSIONER AND CHIEF
ENGINEER OF IRRIGATION.

DEPARTMENT OF THE INTERIOR,

CALGARY, ALBERTA, April 5, 1907.

In the spring of 1906, I sent three engineering parties into the field, one in charge of Mr. J. F. Hamilton, C.E., to gauge all large rivers and streams and establish gauge rods. During the season Mr. Hamilton gauged some 56 streams all told, and established 12 gauge rods in the large streams as follows: Bow river above the C.P.R. headgates. Fish creek at the L. E. railway crossing. Sheep river at railway crossing. Highwood river at traffic bridge. Willow creek at the railway crossing. Oldman river, below the railway crossing. Pincher creek at Pincher. Watertown river, section 20, township 5, range 27, west 4th meridian. Belly river, section 13, township 3, range 28, west 4th meridian. Watertown river at lakes, section 8, township 2, range 29, west 4th meridian. St. Mary's river above Alberta Railway and Irrigation Company's headgates. On all the above gaugings a careful cross-section was made.

The second party was in charge of Mr. P. M. Sauder, with instructions to inspect and report on all the various irrigation schemes which had been authorized and not completed in Southern Alberta, also to gauge all the small streams and make any surveys required by parties purchasing land under the Irrigation Act. Under those instructions Mr. Sauder made 85 inspections and reported on same to this office, and five surveys of land in connection with applications to purchase under the Irrigation Act, and gauged 34 streams.

The third party was in charge of Mr. R. J. Burley, with instructions to inspect and report on all the irrigation schemes authorized and not completed in Saskatchewan, also to gauge all small streams and make any surveys that would be required of lands sold under the Irrigation Act. Under those instructions Mr. Burley inspected 121 irrigation schemes and reported to this office. He also made 23 surveys of lands in connection with applications to purchase under the Irrigation Act, and took gaugings of 17 small streams until the current meter he had went out of order.

During the summer of 1906 I inspected the homestead and irrigation scheme of A. B. & E. Ward, at Kamloops, B.C., also a dry lake for W. W. Nichols, on section 23, township 26, range 2, west of the 2nd meridian, near Yorkton. and in December I inspected a portion of the irrigation scheme of F. P. Aylwin, as far as Arrowood creek, but owing to depth of snow I had to abandon the survey, which I had completed in February last by Mr. J. F. Hamilton, C.E.

During the past season I inspected the works of the Alberta Railway and Irrigation Company, twice, with reference to their expenditure on enlargement and extensions of their works.

With reference to the inside work of this office, since July 1, 1906, there have been 984 communications received, and 2,163 sent out, as well as 43 applications for water rights (in duplicate), 263 agreements for the supply and use of water (in quadruplicate), and some 136 gauge rod readings. There have also been some 20 right of way plans examined and compared, and recorded.

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For the coming season it is intended to carry out practically the same programme of work in the field as last year and have three parties employed on the same class of work and covering the same territory.

JOHN STEWART,

Commissioner and Chief Engineer of Irrigation.

APPENDIX No. 2.

REPORT OF NORMAN M. ROSS, ASSISTANT SUPERINTENDENT OF FORESTRY.

DEPARTMENT OF THE INTERIOR,

OTTAWA, April 3, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry.
Ottawa, Ont.

SIR,—I have the honour to submit my seventh annual report, dating from June 26, 1906.

With the exception of about two months, from December 23, 1906, to March 2, 1907, which time was spent in the office at Ottawa, I have remained at Indian Head conducting the nursery and general tree planting works in the west.

From June until the ground froze up in November, weather conditions were very favourable for tree growth and general nursery work. There was but little rain during the fall, and all new growth had an opportunity to become well matured before winter set in. A heavy fall of snow occurred early in November, which formed a good protection over all the smaller stock and in the new plantations. Throughout the winter the snow fall has been very heavy, and although the weather has been exceptionally severe very little, if any, damage from winter killing is apparent at the present date. Considerable damage has, however, been done by rabbits. This is general throughout the west, judging from reports received from widely separated points. Some men report that their cottonwoods and ash have been very badly cut back and girdled, but the elm is the worst sufferer. In the nursery the cottonwood and ash have not been touched, but the elm is completely cut down, European larch very badly damaged, and the top shoots and terminal buds of Scotch pine nipped off wherever they projected from the snow. The native larch, with the exception of one or two trees, has escaped entirely. Some shrubs, especially *spirea van houttei* and *spirea arguta*, were cut clean to the snow line; *rosa rugosa* bushes were badly nipped and of several fine cut-leaf birch only the stumps remain. As far as the broad leaf varieties are concerned the results are not likely to be serious, but the young conifers will, I am afraid, be very badly misshapen, owing to the loss of the main shoots, and will take some time to recover a good growth. The native white spruce was not touched and the young stock in the transplanting beds was well protected by deep drifts of snow so that it has not suffered.

It is possible, owing to the great amount of snow, that some damage may result from snow break in the various plantations throughout the country, but up to the present we have not had any reports to that effect.

In my last report I have given the names of the inspectors employed during the summer and the districts in which they worked. The reports received from them are as usual very favourable. In Southern Alberta about as far north as Olds, on the

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Edmonton-Calgary line, some injury was done to maples and cottonwoods by winter killing in 1905. This is due no doubt to the effect of the chinook winds which are prevalent in that district, but might also have been caused by cultivation being carried on too late in the fall, thus inducing a late growth which could not mature before the heavy fall frosts. No cultivation should be given among trees after about the middle of August, unless it may be necessary to hoe out a few weeds, which should, under no condition, be allowed to go to seed.

There are to be distributed this spring about 2,000,000 seedlings and cuttings. The varieties as usual will be mostly maple and ash, with a smaller percentage of cottonwood and willow. The percentage of ash will be greatly increased in the plantations for Alberta, the number of maples being reduced as much as possible. The ash in this district has proved exceptionally hardy and is likely to be more satisfactory than maple in the long run.

The number of those receiving trees this year is considerably in excess of last year. I have not at present got the lists from Ottawa, and cannot give the exact figures. The numbers of applications being received both at Ottawa and at the nursery here indicate a very great increase in the interest taken by the settlers generally, and show that this branch of our work is becoming extremely popular. In this case, too, I am unable to give exact figures owing to the fact that these lists are compiled at Ottawa, and have not yet been completed.

PLANTING ON SPRUCE WOODS RESERVE.

As stated in my last report, 17,000 two-year-old Scotch pine seedlings were added to the plantation on Spruce Woods reserve. It is the intention during the coming season to continue this planting, as results obtained up to the present are very encouraging. It is hoped next season and in the future to use considerable numbers of jackpine and native spruce seedlings in this work. Up to the present we have not had facilities for raising these varieties in any quantity, and have also experienced considerable difficulty in securing good seed, especially of the spruce. We find that for the last two years the cones have been infested by a small white caterpillar which destroys numbers of the seeds; consequently a great quantity of cones have to be collected in order to get a very little good seed.

EXHIBITS.

An exhibit was made at the Winnipeg and Brandon fairs in July and August. This exhibit did not differ in any essential respect from those previously prepared for these fairs, and the nature of these exhibits has been fully described in former reports.

NURSERY WORK.

As stated in my last report we had at Indian Head, during the summer of 1906, 36½ acres under nursery crops. The stock on 20½ acres of this was large enough for digging and heeling in for distribution this spring. The following quantities of seedlings were obtained from this area:—

Maple, 1 year old.	586,000
Ash, 2 years old.	1,022,000
Elm, 2 years old.	15,000
Total.	1,623,000

This is approximately 200,000 less than we raised in the previous season, this being due to the almost total failure of a four-acre plot of maple seedlings which

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should have produced in the neighbourhood of 250,000 plants. This plot is well sheltered on all sides but the east. Unfortunately, in the spring, just after the seedlings appeared above ground, we had for several days extremely strong and constant east winds. These driving winds kept the surface soil constantly moving, so that in a very short time the tender leaves of the seedlings were completely cut to pieces. As our stock of maple seed was exhausted it was impossible to reseed this plot. Losses of this nature must, however, be expected. Owing to the sudden changes in temperature in early spring great damage may sometimes be done by late frosts, but the chief danger is to be feared from the frequent and extremely strong winds which always seem prevalent at this time of the year.

Arrangements were made to import from North Dakota 300,000 cottonwood seedlings which were to have been delivered in November. However, only half this number could be procured for fall delivery; the remainder are to be shipped this spring. This will bring the total number of seedlings for distribution up to 1,923,000. About 2,000,000 are required, and willow cuttings will be prepared to make up the necessary total. On well prepared ground we find that there is no difficulty in getting 80 to 95 per cent of willow cuttings to strike, and as the growth is very rapid they are well suited for setting out, in permanent plantations, with the other seedlings distributed.

This spring we give up the use of 17 acres which had so kindly been put at our disposal by the Director of Experimental Farms, for nursery purposes, since 1901. During the coming summer we cannot hope to produce more than about two and a half million seedlings for distribution in 1908, as we have not yet had time to thoroughly put into condition an area more than sufficient for this number. An additional 25 acres will be fit for sowing this fall, so that we shall then have about 75 acres in good condition for nursery purposes. This should permit us to grow on an average three and a half millions annually for distribution. Owing to the difficulty of obtaining labour at certain seasons of the year, and especially the very short time during which digging can be done, it would seem at present that this number will be practically the limit of broad-leaf seedlings that we can expect to produce annually from this nursery.

COLLECTION OF SEED.

Owing to some heavy late frosts in the spring of 1906 the blossoms on maple and ash were so injured that the seed crop of these varieties was a total failure throughout Manitoba and Saskatchewan. Luckily we had on hand a large supply of ash seed picked in the fall of 1905, which was sufficient for our sowing in the fall. Maple seed, however, could be procured only in North Dakota, and it was only possible to obtain 900 pounds from this source. As this will not be much more than sufficient for our own purposes, it will be possible to distribute only a few pounds. During past seasons large quantities of maple and ash seed have been sent out to those applying for it, and from reports received, many farmers have provided themselves with a good stock of young plants grown from this seed.

Elm seed was collected in the Qu'Appelle valley, in June, as stated in last report, a sufficient quantity to sow about 3 acres.

Several bushels of white spruce cones were picked in the Spruce Woods reserve near Sewell, but, as before stated, these cones were so badly infested by a small caterpillar that proportionately only a very small amount of good seed was extracted.

Jackpine cones (*divaricata*) were collected in the Riding mountains by the forest survey party, and forwarded to the nursery, where the seed was extracted during the winter.

Through the kindness of the Japanese Bureau of Forestry, at Tokio, we have been able to obtain a small collection of Japanese trees and shrubs for trial purposes. Other conifer seeds are expected shortly to arrive from Europe. I regret very much that we have again been unable to collect any seed of the native larch.

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CONIFERS.

The results of our nursery work with conifers during the past five years are extremely encouraging. We have now at the nursery, plants ranging from one to five years of age, all grown from seed. The great majority of these are native white spruce, Scotch pine, and native jackpine. Several other varieties being grown on a smaller scale give promise of good results. Among these might be mentioned Colorado spruce (*picea pungens*) western white pine (*pinus flexilis*), Norway spruce (*picea excelsa* var. *septentrionalis*), the seed of which is obtained in Finland, and *pinus cembra* or Swiss stone pine. All the younger stock has come through the winter exceptionally well, owing to the very heavy covering of snow. Some of the older plants which were not so well covered were damaged by rabbits, but with the exception of some Scotch pine which were, last spring, imported from France, there is no sign of winter killing. These French pines have in some cases been very badly browned by the sun and cold winds, though the buds seem still to be in a healthy state and I do not fear that many will be lost, though at first sight large numbers appear to be dead.

The native larch has again during the past season made a most splendid growth. The European variety, though apparently perfectly hardy, suffers so badly from rabbits that some means of protecting plantations of this variety would have to be devised in order to obtain any good results. It is doubtful whether ordinary wire netting would be of much use, as unless the fence were very high the snow would, early in the winter, drift up so much that the rabbits could easily get over it. To put up a very high fence would mean such an expense that one would not wish to do this except where the plantation was desired for testing or experimental purposes. Such trees as have escaped the rabbits show even a stronger growth than the native variety. We hope this spring to obtain from Europe a supply of seed of the Siberian larch, which is expected to be rather better adapted to the climate of the west than the common European variety.

PERMANENT PLANTATIONS.

All plantations set out since spring, 1904, have made splendid progress. White spruce set in 1904, last season made very strong growth, the new shoots in some instances being at least two feet long. In my last report a description of several new plantations set out in 1906 was given. The five acres of coniferous planting (white spruce and Scotch pine) appear up to present date most successful. Of the broad-leaf plantations set out last spring, the elm in No. 4 (a mixture of elm and ash) has suffered very badly from rabbits. The native white birch in plantation No. 3 (a mixture of Manitoba maple and birch) did not transplant well, nearly 50 per cent dying. This was due no doubt to their poorly developed root system on account of their having been too close together in the seed bed. A very interesting point is shown in this plantation, the value of transplanted and seedling stock. In this plot approximately 1,315 birch seedlings and 500 birch transplants were used. Of the 500 transplants not a single one died and all made very strong growth. Of the seedlings, handled and planted with equal care and on exactly same ground, about 60 per cent succumbed. As we have no ground which can be spared for further permanent planting this spring, we cannot continue along this line at present.

It is hoped, however, that about 25 acres of new land will be prepared for this special purpose and be fit for planting in 1908.

ORNAMENTAL GROUNDS AND SHRUBBERY.

Each season adds to the appearance of the lawns, drives and shrubbery planting. The main drive, which is about 500 yards in length, has been thickly planted on

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either side with various kinds of hardy, ornamental shrubs set in irregular groups with an occasional tree here and there. The belt of shrubs extends on either side of the drive to a depth of from 18 to 50 feet and is bounded by a few rows of trees for shelter purposes. The principal varieties of shrubs are lilacs, Tartarian honeysuckle, Ginnalian maple, *rosa rugosa*, red twigged dogwood and some varieties of spireas. With the exception of the Ginnalian maples, these are all flowering shrubs. The different varieties have been planted in masses or groups in order that during the blooming season the best effects may be obtained. In the neighbourhood of the buildings and around the lawns herbaceous perennials and annuals are used extensively in the borders. The number of visitors to the nursery is increasing very rapidly, and no pains should be spared within reasonable limits to make this portion of the grounds as attractive as possible, if only to demonstrate to new comers in the west what may be expected in this country as a result of proper methods of cultivation and the selection of suitable varieties.

PLOUGHING AND FARM WORK.

In addition to the work entailed in looking after the general nursery crops, there were raised on the nursery over 2,000 bushels of oats, 200 bushels of barley, and about 20 tons of rye grass hay. A considerable quantity of the oats has been disposed of for seed grain, as the whole crop is not required for our own feed. During the winter the horses are fed only on oat straw with a small quantity of grain, and considerable straw is required for bedding throughout the year. This is one of the reasons for growing more oats than we actually require for our own use; another, and the principal one, is that in order to fit the ground for nursery purposes it is a great advantage to raise a grain crop on the land after it is freshly broken. During the season of 1906, 20 acres of ground were ploughed as summerfallow and 30 acres broken, backset and thoroughly disced and harrowed. In the fall 10 acres of the summerfallow was sown to ash seed marked off into one-acre plots, and caragana seed sown to provide permanent hedges to shelter the plots and mark their boundaries.

BUILDINGS.

Owing to the increase of the work and the lack of accommodation for the required number of labourers, it was found necessary to erect another house for this purpose on the nursery. Work was commenced on the building in October, which was completed during the winter, and is now being occupied by the men. We now have comfortable accommodation for about 18 men. Though not more than eight or nine are regularly employed during summer, the extra work in the spring and fall necessitates the employment of many temporary hands, whom in the past we have found it very difficult to obtain when accommodation could not be provided for them.

Owing to the addition to the nursery of an adjoining 160 acres, an extra team of horses had to be purchased, which made necessary a small addition to the present stable. This is now under construction and will be completed before the spring work commences.

When our work was first started in 1902 a small building used as a packing house was built on the experimental farm. This building will have to be moved up to 'the nursery' during the coming summer, and should be considerably enlarged, as it is now far too small for our present distribution work.

ADDITION TO NURSERY.

The quarter-section adjoining the original 160 acres on the west side was added during the past season to the nursery. This land is still prairie; it is comparatively rough, is rather lighter in soil than most land in the district, and in places there are

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good natural bluffs of aspen, with a general strong growth of wolf willow over the greater portion. This scrub will require cutting out before breaking can be done, but the general character of the soil is very suitable for tree growth. The ground is far too rough to be of value for nursery crops, so it is intended to use it altogether for setting out comparatively large demonstration plantations and raising our grain and hay crops. It is proposed to break up and backset 50 acres this summer, 25 of this to be ploughed a third time, and if possible put in shape for planting in the spring of 1908. An attempt will be made to collect this spring about 30,000 native larch seedlings, which will be transplanted in the nursery and set out permanently in about a ten-acre plantation on this new ground in 1908. Large plantations of white spruce and native jackpine will be set out at the earliest opportunity, and considerable planting of rapid growing broad-leaf varieties, such as willow and cottonwood, will be done, with a special view to demonstrating the practicability of raising fuel quickly. Results from plantations of this nature should prove of great value to the west generally, as at present it is not possible to obtain any reliable data regarding the growth of trees under cultivation for economic purposes. This we find to be a great handicap when trying to persuade some men to plant for direct returns, as, without actual facts and figures, it is difficult to convince a person, who has had but little experience with trees in this country, that such work would be very profitable.

MACHINE FOR SOWING MAPLE AND ASH SEED.

Since 1901 all our seed has been sown by hand, and as each year the number of acres to be sown has increased different methods for doing this work have necessarily been evolved. When only a small area was required drills were made with a Warren hoe and the seed scattered in the drill, which was finally leveled over with a rake. This necessitates a line being stretched for each drill, and was an extremely slow process. Such a method with three or four acres to sow within a few days becomes out of the question. A plough was then tried for making the drills. This somewhat hastened the operation, but a large gang was required to keep up with the team and cover over the seed before the ground dried out or the seed was blown out of the furrows. The plough was discarded, as this buried the seed too deeply.

Finally we adopted a method of marking out drills with an ordinary single horse scuffler, only the two back teeth being used with large shoes, the teeth being spread apart to about 30 inches. The seed was dropped as evenly as possible and another single horse strawberry cultivator was used for covering in the seed. By thoroughly flailing the seed in bags during winter and rubbing it through sieves of about $\frac{3}{4}$ of an inch mesh all the wings were taken off, and it was found that a man could drop the seed very fast and very evenly in calm weather. We find that with this method four men (two driving the scufflers and two dropping seed) were able to sow as much as four acres a day, making the drills 20 to 30 inches apart. On windy days, however, it was impossible to make any headway there. Where strong winds are so prevalent, there are often weeks at a time when it would be out of the question to sow in this manner. When twenty or thirty acres have to be sown before a certain date in the spring, sowing by hand entails too much risk. There seemed to be no reason why, after the seed had been well cleaned and separated from the stalks a machine could not be found which could do the work even in windy weather. A machine has been obtained from the Massey Harris Co., which after considerable difficulty has been so arranged that from all appearances and from tests made in the shop, it should do very satisfactory work. This seeder will sow three drills at a time 30 inches apart, and is worked on the same principle as the grain drill. The seed can be put at any depth, and attachments are provided for covering in the drills. It is to be hoped that the seeder will turn out to be satisfactory when put to the actual test, as with it 8 to 10 acres per day should be sown, using only one man and two horses. There should also be a great advantage in having the seed dropped more evenly and covered more uni-

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formly. The possibility of regulating the furrows without difficulty is a point of great importance.

During the past winter there was great suffering caused, owing to the scarcity of coal and the practical impossibility of obtaining wood at any price in many districts. A similar state of things is likely to occur again at any time in the future. Such an experience should convince all far-seeing settlers as to the advantage of growing their own fuel. That this can be done, within a very few years and at a considerable financial profit in almost any part of the west, is undoubtedly a fact. As large areas can be planted and cared for at a proportionately less cost than very small plantations, it would seem that something should be done along this line, either by the rural municipalities or the government. In many parts of Europe there are communal or municipal forests. These are operated by the municipalities, usually under the direction of the state, and the resulting profits are used for ordinary municipal expenses. In many cases the revenues are so large that taxation is not necessary to keep up municipal work. It would seem a reasonable proposition, in this country, that in regions where natural wood supplies cannot be obtained except at great expense the municipalities, probably with the co-operation of the government, should obtain considerable areas and plant these up with such trees as would seem most profitable. The original cost of planting, &c., could be largely met by first growing on the land a crop of grain. If a section in each district could be obtained for this purpose, supposing 100 acres were planted each spring for six years, a portion of the remainder could be utilized for cropping and 100 acres summer-fallowed every summer to be ready for the next spring's planting, until the whole area was stocked. In from seven to ten years a certain amount of fuel could no doubt be obtained, the quantity and value increasing annually with the age of the plantation. Such a plantation would very soon become self-supporting from sales of wood and would undoubtedly return a substantial profit in later years. With municipal wood lots of this nature throughout the country little fear need be entertained as to a repetition of last winter's experiences. I make this suggestion in the hope that some method may be considered for at least testing the practicability of this proposition. The necessity for something of the sort is very evident, and the great advantages which would result to the country generally would seem to warrant the government in very materially assisting any municipality that would be willing to co-operate in this work; perhaps even, in order to encourage the work, it could establish these wood lots, and after they had become remunerative they might be turned over to the control of the municipalities.

Your obedient servant,

NORMAN M. ROSS,

Assistant Superintendent.

APPENDIX No. 3.

REPORT OF HUGO CLAUGHTON-WALLIN.

DEPARTMENT OF THE INTERIOR,

OTTAWA, March 31, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa.

SIR,—I have the honour to submit herewith my annual report of work carried on under directions from the Forestry Branch.

At the beginning of the fiscal year I was conducting a forest valuation survey in the Riding Mountain Forest reserve, with the assistance of seven students in forestry.

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In the year 1905 similar work had been carried on in the Turtle Mountain and Moose Mountain reserves under the supervision of Mr. R. D. Craig. The method followed this year was the same as the previous season, and as described by Mr. Craig in his last report. A valuation survey was made of the following townships: townships 23, ranges 19, 20 and 21; townships 22, ranges 20 and 21; townships 21, ranges 20 and 21; townships 20, ranges 19, 20 and 21; townships 19, ranges 18, 19 and 20. The following townships were partly surveyed: township 22, range 19; township 21, range 19; township 20, range 18; and township 19, range 17.

Here as well as in the other Manitoba timber reserves fire has caused considerable damage. Of the townships mentioned above the best timber is found on townships 23, ranges 19 and 21; townships 22, ranges 19 and 21; and township 21, range 19. Some good timber is to be seen in township 23, range 20, and townships 20, ranges 18 and 19; but with this exception the ground gone over was found either almost entirely devoid of mature timber and generally covered with good five to twenty year old reproduction of aspen and balm, or very open and prairie like, with scattered smaller bluffs of green timber, as specially in the country south and west of Clear lake.

The coniferous trees found in the reserve are white and black spruce, larch, jack-pine and some balsam.

The deciduous trees are represented by aspen, balm, birch, Manitoba maple, oak, ash and elm. The last four varieties are found chiefly on the north and east slopes of the mountain.

The prevailing forest consists of aspen and balm in a broken stand, with small groves of spruce and scattered birch. Large muskegs of larch and black spruce are numerous near the height of land. Jackpine is found northeast and southeast of Clear lake. Fire has, however, done much damage there. The reproduction is excellent in places.

The injuries done by insects to the timber are not very important. I quote the following extracts from the notes of Mr. Jas. R. Dickson, of the University of Michigan, who was the entomologist of the party:—

‘The spruce is sometimes attacked by the destructive bark beetle (*dendroctinus rufipennis*). At the present time no considerable damage has been caused by this borer, but there is always a danger of it causing widespread injury. The spruce gall louse is abundant at Clearwater lake, where it gives the spruce a very ragged appearance, attacking and killing the lower branches first and thus making conditions most favourable for the rapid spread of a fire. The shield-bearing spruce borer is very commonly found in the fallen or dying timber. North of Clear lake the larva of a species of *retinia* was found attacking the young spruce cones, destroying the seeds. The jackpine has many insect parasites. Among them may be mentioned a *pissodes* larva which kills back the leaders in the young reproduction. On the bark is the pine louse (*chermes pinicorticis*) and the cones are sometimes ruined by the weevil *dryocaetis*.

‘Probably the worst insect enemy of the aspen in the Riding mountains is the spotted cottonwood beetle (*lina lapponica*). The striped variety (*lina scripta*) was also captured. The dark, spiny larva of these beetles are defoliators, and when numerous soon skeletonize the leaves over a considerable area.

‘The ants, birds and predaceous beetles are, however, holding the destructive insects well in check, and the entire insect damage is a mere bagatelle when compared to the losses by either fire or fungi.’

The trees in the Riding mountains that seem to suffer most from the fungi are aspen and balm. Stands of them are found where scarcely a tree is not affected by these pests, chiefly *polyporus igniarius*. Wherever we find any of these hoof-shaped brackets in a tree it is a sure sign that the fungus has gained access to the tree and is destroying the wood. Settlers should be directed to do their cutting in these affected stands, as the only method of checking the disease is to remove the affected trees.

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The coniferous trees are in a healthier condition, though quite a few fungi-affected specimens are found on the reserve.

Game is quite plentiful. Moose and elk were often seen by members of the forest valuation party. There is no doubt, however, that their number is decreasing, as during the open season the mountain is a regular play ground for all kinds of hunters and would-be hunters, who, according to their own tales, are not very particular about sex or number of slaughtered animals; and there are many squatters who, during the closed season, would not let a possible chance of a shot at an elk pass. Tracks of bears were seen now and then. Beavers were found at work at Lake Audy and the Whirlpool river. The bird family is well represented.

The survey work for the summer was closed on the last day of September. In October I was occupied with the locating of squatters on the Riding Mountain reserve. I found about fifty families, mostly French half-breeds and Galicians. The former are scattered around Clear lake, where they have fair buildings but very little land under cultivation. The Galicians are principally in the western part of the mountain. It is a pity that these people have been allowed to settle on the reserve, as there is no doubt that they are and will be the cause of many a destructive fire. Every year there are some new families moving within the boundary of the reserve. A special report in regard to the squatters and their improvements has been made, to which I would refer you for further information.

At the end of October I returned to Ottawa, and have during the winter been occupied with working up the data secured during the summer. If it be my privilege to continue the work in the Riding Mountain reserve next summer I hope to be able in my next report to give a full account of the amount of timber, the rate of growth of the different species, the quantity of wood that could be cut yearly, &c. Volume tables will be constructed.

I have the honour to be, sir,

Your obedient servant,

HUGO CLAUGHTON-WALLIN.

APPENDIX No. 4.**REPORT OF A. H. D. ROSS, M.A., M.F., TECHNICAL ASSISTANT.**

OTTAWA, ONT., April 1, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa.

SIR,—I have the honour to submit the following brief report of my work subsequent to September 14, 1906. From that date I continued my work of inspecting the tree plantations established by the co-operation of the Forestry Branch with settlers in Northern Manitoba, and along the Yorkton branch of the Canadian Pacific Railway in Saskatchewan as far as Foam lake.

In most instances I found the trees well cared for, and that the growth was excellent. In some quarters there is a prejudice against the green ash because of its slow growth at first and its liability to injury from rabbits, but most planters are now convinced that it is an excellent tree to mix with the faster growing Manitoba maple or boxelder, willow and cottonwood, which give the desired ground cover to prevent evaporation, and at the same time break the force of the severe gales which blow across the prairie for days at a time.

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From October 4 to 25, I inspected plantations in the Maple Creek region in Saskatchewan, and the Medicine Hat, Gleichen and Calgary districts in Alberta. Here I found that the cottonwood, green ash and willow have done best, the Manitoba maple or boxelder being generally killed back by frosts following the warm chinook winds.

On October 26 I left Calgary for Ottawa, arriving here on the 31st. During the winter I have been engaged in the office preparing the lists of applicants to receive trees the coming season; drawing plans showing how the trees sent out should be mixed to get the best results; helping in answering of inquiries of various kinds; the drawing of curves showing the height and diameter of growth of spruce and larch in the Riding Mountain reserve, and other routine work.

Your obedient servant,

A. H. D. ROSS.

APPENDIX No. 5.

REPORT OF F. W. H. JACOMBE, M.A., M.F., TECHNICAL ASSISTANT.

OTTAWA, ONT., April 11, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I have the honour to present my report for the period extending from September 8, 1906, to March 31, 1907.

During the remainder of the month of September, 1906, I continued my work of inspecting the plantations along the Soo line. Most of these I found to be in good condition, in spite of the very dry weather during the summer, and well cared for. Cottonwoods planted in the spring of 1904 had, in a number of instances, attained a height of eight feet or thereabouts. The inspection of this line was finished by the end of September.

Since December 1 I have assisted in the office work of the branch at Ottawa, my work having consisted of drawing plans for new applicants planting trees this spring for the first time, making out distribution lists and performing other routine work in this connection.

I have the honour to be, sir,

Your obedient servant,

F. W. H. JACOMBE, M.A., M.F.

APPENDIX No. 6.

REPORT OF A. P. STEVENSON.

DEPARTMENT OF THE INTERIOR,

OTTAWA, ONT., April 1, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I have the honour to submit the following brief report on the work done by me as tree planting inspector in connection with the work carried on in this province by the Forestry Branch of the Department of the Interior.

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Early in June, 1906, I went to Winnipeg to meet Mr. N. M. Ross, Assistant Superintendent of Forestry, to arrange inspection work in Manitoba for the summer. Two men were expected from the Yale Forest School, Mr. Ross and Mr. Jacombe, to take part in inspection work. On June 21 these men arrived in Morden, where I met them, and in a few days they began on the work of inspection.

Mr. Jacombe began work at St. Claud on the Glenboro branch of the Canadian Pacific Railway, working westward to Estevan, in Saskatchewan; Mr. Ross working along the main line of the Canadian Pacific Railway and its northern tributaries in Manitoba.

The district covered by myself was the Red River valley and westward to Boissevain, also the main line of the Canadian Northern Railway, from Winnipeg westward to Warman, Saskatchewan. This is a new district, both as regards settlement and applications for trees to the Forestry Branch. The majority of the settlers are from the United States, and all thoroughly appreciate the benefits of a properly planted and laid out shelter belt. This is evidenced by the fact that 99 per cent of applicants for trees are only two years settled on their land. With them trees are just as essential to life on the plains as are buildings, and as a result only expressions of satisfaction are heard with the broad-minded policy of the Forestry Branch in assisting them with advice and planting material. Of the trees set out in the spring of 1906, 95 per cent were alive in the fall. The spring was a favourable one for tree planting, and the young trees, on account of the careful supervision in packing and shipping, arrived at their destination in first-class condition.

It was noticed that the ash tree is giving splendid satisfaction, where grown with boxelder or elm. Planted four feet apart, each way the growth is very satisfactory. The Russian willow and cottonwood are showing up very prominently, being among our most rapid growers. The latter are great favourites with the American settlers, who are delighted to find the well-known tree will succeed so well with them in this country. The groves planted out in 1901 and 1902 under the co-operative scheme are now in many cases fine plantations, and in some districts are changing greatly the appearance of the landscape, the dull monotony of the plain giving place to nice bluffs of trees. It is also noticed that the interest in fruit growing is increasing on account of the farmers having these windbreaks. A demand is also arising for ornamental trees and shrubs and perennial flowers, which without the shelter belts would never have been heard of. During the summer of 1906 on various occasions trees in plantations set out under Forestry Branch supervision were measured and a height of 18 feet 4 inches recorded. This gives a fine object lesson of what can be accomplished in tree planting on the prairie, when the proper conditions are given as to planting, care, cultivation and right varieties.

Your obedient servant,

A. P. STEVENSON.

APPENDIX No. 7.

REPORT OF JOHN CALDWELL.

VIRDEN, MANITOBA, April 1, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I beg to submit to you my report for the summer of 1906.

I began work June 18, and finished November 15. The territory given to me was the Kirkella line to Neudorf, the main Canadian Pacific Railway line from the Manitoba boundary to Regina, and the Arcola line back to Manitoba.

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The great bulk of this territory is wide, open prairie, and farmers are taking an ever increasing interest in the planting of shelter belts and windbreaks. Probably 85 per cent of all trees planted to date are doing well, which I consider quite satisfactory. A few years of this work under good supervision will add greatly to the appearance of the country and to the comfort of the homes.

About 75 per cent of the plantations in my district are made up of maple, ash and cottonwood, the remaining 25 per cent of elm, willows and Russian poplars. The demand of course is for fast growers. The elm and ash are a little slow, but still they are perfectly hardy and in the end will make by far the best and most durable trees, and in order to give the plantations a more permanent character we must insist on a fair proportion of these hardwood trees.

Very few willows or poplar have been sent out for four years, and while I am not in favour of many poplar I would like some. I have fifteen years' experience with willows in Manitoba and they are growing much in favour with me. They are extremely hardy and fast growers, they leaf early and hold the foliage late, and are likely to live a fair age.

The cost of growing willow cuttings in large quantities is about 75 cents per 1,000, although I would rather send them out rooted. The cost then would be about the same as cottonwoods from Dakota. A farmer, when once started with willows, could easily propagate from his own trees. I class the willows among our most useful trees.

Farmers are nearly always glad to see the government tree man come around, and they greatly appreciate the good advice tendered. No doubt, this past unusually severe winter, with a coal shortage, has caused many a farmer to wish he had a twelve or fifteen year old bluff back of his buildings. It would certainly have given him less cause for anxiety.

The question of whether trees can be grown on these western prairies is a question no longer, as we have splendid examples all over the country. Probably the most important feature with the inspector is to give the farmer to understand the importance of having the land in a good state of cultivation before he plants, and the necessity of good, clean cultivation afterwards. I am not in favour of handling trees too large. A first-class one-year-old maple is better than a first-class two-year-old; the expense of handling and shipping is less, the work for the farmer is less, which means a good deal in a busy time, and the younger tree is likely to take a hold more quickly and to make the best tree.

The best distances I still think 4 feet x 4 feet, or 3 feet x 5 feet, and we should always be careful and prevent breaks being planted too close to the buildings, as that is a mistake so often made. I find a good many farmers wanting more than they can properly look after; it is far better to take less and get more again. North of Moose mountain and along the Kirkella line there are large settlements of foreigners who know very little of the tree planting work. These people are mostly very industrious and progressive and producing a great deal of wealth. They are there to stay, and means should be adopted to let them know. They are generally fond of tree planting, and would more than likely take good care of trees given to them in this way.

Large farmers who are extensively into wheat growing are not so interested in tree growing as they should be; they are too busy making money. Among the farmers on the quarter and half-sections is where we are most appreciated and where we can do most good.

The planting of trees for fuel and fencing purposes has not received much attention as yet, but for shade and shelter nearly every man who intends living in the country is only too glad to avail himself of the opportunity of getting trees and advice in this way.

The Canadian Northern Railway and Grand Trunk Pacific expected to run from Brandon to Regina, will open up a large tract of new country, and for some years to

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come I expect a heavy demand for trees from southeastern Saskatchewan. I had the pleasure of visiting the Forest Nursery at Indian Head twice this summer and was gratified to see the wonderful improvement and the large quantities of good stock growing, under the charge of Mr. Ross. The growing of large blocks of healthy young trees is of great importance in connection with this work.

I find the general public very much in favour of this tree planting among the farmers. They know that in agriculture lies our sure foundation, and work of this kind, which adds so much value to the farms and gives the whole country so much more of a prosperous and comfortable appearance, is time and money very well spent.

With the country filling up so rapidly we are sure of a heavily increased demand. We know how dreary and desolate a new country looks, and one of the first desires expressed is for shade and shelter, and for years to come we should feel it our duty and pleasure to fully meet this demand with every possible encouragement.

Your obedient servant,

JOHN CALDWELL.

APPENDIX No. 8.

REPORT OF JAMES LEAMY, CROWN TIMBER AGENT.

NEW WESTMINSTER, B.C., May 20, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I beg to acknowledge the receipt of yours of March 27, last, asking me to forward as soon as possible my annual report in regard to the fire ranging service in the Dominion Railway Belt in British Columbia.

In compliance therewith I beg to submit the following short report:—

I have very little to add to my report of September 17, 1906, except to state that all the fires mentioned in that report were completely put down and very little damage resulted, if any, therefrom. The accounts in connection with last year's fire ranging system have been duly sent forward to your department. This season, about the latter part of April, the country being very dry, numerous fires have occurred, doing considerable damage, and I am informed that a quantity of saw-logs on skidways were burned on a limit owned by the Bowman Lumber Company on the east bank of the Columbia river, below Revelstoke. The matter was promptly attended to by Fire Ranger McRae. The last report from him is to the effect that fires are still burning, but are held in check. As the rain began here yesterday I have no doubt that the condition along the Columbia river will be bettered.

In this lower district several fires have occurred along the settled lands, but only in one instance have they extended into the timber, that is near Pitt lake, but we have had a very heavy rain within the last day or so, and those fires are extinguished.

I would respectfully suggest that I be allowed to employ more fire rangers, in order to prevent the occurrence of fires. During the last winter a severe sleet and snow storm occurred which broke down all the young timber, alder, &c., and has covered the ground in a great many places with a very heavy mat of this timber, and if fires occurred it would certainly prove very disastrous, and we cannot exercise too much vigilance in looking after them.

There has been some slight change made in the Fire Act in British Columbia, particularly regarding the locomotive engines and logging engines, which, if carried

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into effect will prevent a number of fires. I have a complaint to make against the Great Northern Railway Company. Their locomotives, owing to defective fire screens, have thrown sparks and caused numerous fires; in fact they are a menace to any country they pass through.

I may add that men are very scarce and are asking from \$3 to \$3.50 per day for their work. There is a great scarcity of labour in the country.

The rangers working so far are: Mr. Cameron Fisher, of Golden; Mr. Frank Ashdown, of Golden. I have divided that district in two, as it was much too large for one man to look after, and both will have their headquarters in Golden, but working in opposite directions. Mr. Alex. McRae, of Revelstoke; Mr. J. D. McGuire, of Salmon Arm; Mr. Angus McGillivray, of Ashcroft; Mr. Murdock Martyn, of New Westminster; Mr. F. W. Hughes, of Mission City; Mr. M. G. Fadden, of Upper Sumas; Mr. John Ball, of Abbotsford, and Mr. Neil W. Johnson, of Elgin.

Your obedient servant,

JAMES LEAMY,

Crown Timber Agent.

APPENDIX No. 9.

REPORT OF C. A. WALKINSHAW, FOREST RANGER.

BOISSEVAIN, MANITOBA, March 31, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I beg to submit to you my report of the work done in the Turtle Mountain timber reserve during the past year.

During the month of April and part of May the weather was very dry. Mr. Hamilton, my assistant, and I were kept very busy fighting fires. They were so numerous along the international boundary that I found it necessary to call out assistance to prevent them coming across into the reserve. One did come across at the western part of the reserve, between ranges twenty and twenty-two. While we were fighting this fire, I saw another near the boundary in range twenty, and going in the direction of the forest ranger's house and stable. I took assistance, and by the time we got there it was across the boundary, but fortunately the wind changed around and blew it back into Dakota. That night I counted fifteen big fires burning along the boundary. They made a good fire guard for us. I drove across the line and remonstrated with the settlers about their carelessness in setting out fire, but they only laughed at me. If the wind had not changed when it did the fire would have made terrible havoc in the reserve. When all danger from fire was past I planted two hundred young Scotch pine, sent me from the Experimental Farm at Indian Head, to see how they would do in Turtle mountain. Nearly 90 per cent of them grew and looked healthy when the snow came last fall. Mr. Hamilton and I made a good road through the reserve from the northern part of section thirty-three, township one, range twenty, to section nine, township one, range twenty, where the forest ranger's house is situated. When we got this road finished we patrolled the reserve, guarding against fire, and I am happy to say there was not a spark in the reserve all fall. I may say there was very little wood cut in the reserve this winter, as no person was allowed to cut green wood, and the snow being so deep, it was hard work getting dry stuff. A

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great many farmers who in other years hauled their wood from the reserve, bought coal or bought their wood from private parties who have wood lots in township two.

I am, sir,

Your obedient servant,

C. A. WALKINSHAW,

Forest Ranger.

APPENDIX No. 10.

REPORT OF JOHN RUTHERFORD, FOREST RANGER.

CARLYLE, SASKATCHEWAN, April 18, 1907.

R. H. CAMPBELL, Esq.,
Superintendent of Forestry,
Ottawa, Ont.

SIR,—I have the honour to forward you the following report of affairs in the Moose Mountain timber reserve.

The growth of young timber has increased greatly of late years. Practically speaking there is no standing dry timber, owing to severe wind storms. There is a considerable amount of lying half-green timber. I would strongly recommend the opening of a road through the centre of the timber reserve, running from Fish lake to the western boundary of the reserve.

I am, sir,

Your obedient servant,

JOHN RUTHERFORD,

Forest Ranger.

APPENDIX No. 11.

REPORT BY E. STEWART, SUPERINTENDENT OF FORESTRY, OF A
TRIP DOWN THE MACKENZIE AND UP THE YUKON RIVERS
IN THE YEAR 1906.

OTTAWA, November 16, 1907.

The Honourable FRANK OLIVER,
Minister of the Interior,
Ottawa.

SIR,—I have the honour to submit the following report on a visit made by me under your instructions during the past season to a portion of our far northern regions within the area drained by the Mackenzie and Yukon rivers. The route taken was down the Athabaska, Slave and Mackenzie rivers, crossing on the way Athabaska and Great Slave lakes, to the delta of the Mackenzie; thence across the mountains to the Bell and Porcupine rivers; down these streams to the junction of the latter with the

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Yukon; and returning up the Yukon to Whitehorse, passing Dawson on the way; from Whitehorse to Skagway by rail, and thence to Vancouver by steamer.

The primary object of the trip was to gain information regarding the timber resources of that part of the Dominion, but note was also taken of the character of the soil and of the minerals, fish and game of the country.

PREFACE.

Having decided on the route to be taken, I communicated with Mr. C. C. Chipman, Commissioner of the Hudson's Bay Company, to whom I had been indebted for great assistance in a former journey to the Peace river, and received from him letters of introduction to certain officers of the company, which served as a passport that only had to be presented to insure not only ordinary attention, but all the hospitality that could be afforded in the country.

Mr. Thomas Anderson, Chief Inspector for the Northern or Mackenzie River district, accompanied the transports all the way down to Fort McPherson, and did everything possible to assist me. I am also indebted to the Royal Northwest Mounted Police for their hospitality in a country where hospitality means so much.

FROM EDMONTON TO ATHABASKA LANDING, 96 MILES.

After making what arrangements seemed necessary for the journey, I left Edmonton on June 3, 1906, for Athabaska Landing.

For the first twenty-five miles the road passes through a splendid agricultural country, which is well settled to the crossing of the Sturgeon river. After that the soil becomes lighter, and from there on to 'The Landing' it varies from what might be called second-class land to light sand covered with jackpine. This is along the trail, but I am informed that many tracts of good land exist at different points both to the east and west of the trail. This seems reasonable to expect, as the trail follows the ridges, which are more likely to be sandy than the lower lying land. Much of this second-class land is well adapted for grazing, there being a good growth of grasses and pea vine. On this portion of the route there is very little timber of special value, though the jackpine will be useful for railway ties, posts, &c.

We reached Athabaska Landing at noon on the 5th, taking about two days and a half to make the trip.

The weather was warm and at times sultry, culminating in a heavy shower of rain on the second day out. This was much needed for the grain, and also to quench the forest fires, which were becoming numerous.

FROM ATHABASKA LANDING TO GRAND RAPIDS, 165 MILES.

At 'The Landing,' which is on a southerly bend of the Athabaska, we learned that the steamer on which we were to take passage would not leave for a few days.

On the afternoon of Friday, June 8, our steamer *The Midnight Sun*, towing several scows all laden with supplies for the northern posts, let loose from the shore, and, assisted by the swift current so characteristic of those northern rivers, was soon hurrying down stream at the rate of ten or twelve miles per hour.

I shall copy pretty freely from notes taken on my trip, and the table of distances herewith copied from one in the Hudson's Bay Company's post at 'The Landing' will assist the reader in following the narration. I am informed that these distances are practically correct, as Mr. Wm. Ogilvie, D.L.S., made a micrometer survey of the route some years ago.

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From Athabaska Landing to	Distance in Miles.
Pelican Rapids.	120
Grand Rapids.	165
Fort McMurray.	252
Chippewyan.	437
Smith's Landing.	539
Fort Smith.	555
Fort Resolution.	749
Hay River.	819
Fort Providence.	917
Fort Simpson.	1,078
Fort Wrigley.	1,214
Fort Norman.	1,398
Fort Good Hope.	1,572
Peel's River (Fort McPherson).	1,854

The Midnight Sun is a flat-bottomed craft 120 feet long by 20 feet beam, and draws, when loaded, about 2 feet 6 inches. Her cargo, as well as that of the scows, contained almost every article that could be found in a departmental store—flour, bacon, tea, sugar, canned goods, powder, shot, guns, cartridges, blankets, clothing, kettles, axes—in fact everything that goes to make life even endurable in those isolated regions.

On board were several passengers; half-breeds going to different points; a party of four young white men, on their way to Fort McMurray, to resume work started last year in boring for oil there; a lady worker at the Anglican Mission at Hay river; a young clergyman of the same church on his way to Fort Norman at the junction of the Great Bear and Mackenzie rivers; a Mr. Steffensson, going to Fort McPherson and thence north to the Arctic sea to join the Anglo-American Polar Expedition; and a mounted policeman also bound for Fort McPherson, to join a detachment of the force there.

We passed the mouth of Lac La Biche river, which is about 40 miles down from 'The Landing,' and tied up for the night at the mouth of Calling river, at 7 p.m., having made 50 miles on our journey.

The country along the banks from 'The Landing' down for some 40 miles has suffered very much from fires. Below this point less damage has been done to the timber, which consists of poplar, birch, spruce, balsam, &c., the spruce being mostly along the river and its tributary streams. It is generally rather too small for lumber, though some belts contain trees of a sufficient size for that purpose.

The appearance from the steamer would indicate that generally the timber is of second growth. The spruce seems to be overtaking the poplar and will supplant it in time. This timber is well worth preserving from fire. The country is undulating, not generally rocky, and the soil of a fair quality. Mr. Prudens says he raises as good wheat at Calling river as can be produced anywhere on the prairie.

The Athabaska is here about 60 rods wide, the current at this time about $3\frac{1}{2}$ miles per hour, and the water of a yellow colour. The land rises gradually back from the river to a height of from 200 to 400 feet.

On Saturday, June 9, we started from Calling river at 8 a.m., and at 4 p.m. tied up at the upper end of Pelican rapids, having now made 120 miles from our starting point.

Near the water's edge on the north side of the Athabaska and at the upper end of Pelican rapids the Dominion government sunk a well two or three years ago. At a depth of some 837 feet, the last 87 feet being through tar sands, gas was struck, which prevented further sinking. From this well a strong current of gas and water issues. The gas was on fire at the time of our visit. The flame was about 15 feet high above

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the pipe, and the noise could be heard for perhaps a half mile distant. When first struck it could be heard several miles, and the flame was much larger.

The Dominion government, in prospecting for oil a few years ago, also put down a hole at Victoria, Alberta, hoping to strike oil on reaching the tar sands at an estimated depth of 2,100 feet. At 1,840 feet the casing became wedged and the work was stopped. Another attempt was made at Athabaska landing, with a similar result, the casing becoming wedged at 1,770 feet, within 30 feet of the calculated depth of the tar sands, where oil probably exists in considerable quantities. These tar sands will be referred to later on.

The timber is still poplar and birch, with some belts of spruce of rather small size. Very little exposure of rock along the banks has so far been seen.

At 1.15 p.m., on Monday, June 11, the steamer left the upper end of the rapids and ran down stream for three-quarters of an hour, when our pilot ordered another stop, as the wind was strong after us and he feared an accident in the rapids. Four of the scows that we had been towing were, however, sent on ahead.

At 5 a.m. on Tuesday, June 12, we started again, but in less than an hour had to tie up to repair the steamer. A stone had been stove through the planking at the bottom. We started again at 9.30 a.m., and reached House River rapid at 12.45 p.m., and tied up again. The water is too low at present for our boat.

The country is fairly well wooded in this part with poplar, birch and some spruce, but so far no great quantity of the latter of good quality has been seen. The soil is generally a clay loam, with sand on some of the hills, but on the whole I am fully persuaded it will yet be settled and found productive.

On Saturday, June 16, after four weary days of waiting, the steamer moved down the river about 6 miles to a point about 4 miles above Grand rapids. During this time she had been nearly emptied of her cargo by the scows, and this permitted her to pass through the shallow water. The fact is, this part of the Athabaska is scarcely navigable for steamers, except for a very short time in summer, when the mountain water is in flood.

Another delay of five long days, each one nearly twenty-four hours in length, occurred during which the steamer lay tied up to the bank above Grand rapids.

The days are not only long, but the weather is getting hot, 90 degrees in the shade being quite frequent, and the mosquitos are plentiful and quite as industrious as those in more southern latitudes.

These delays enabled me to see something of the country a little back from the river. I found it to vary considerably at different places. In some districts the soil was too light for agriculture, while in other parts there were stretches, of apparently considerable extent, of very fair land.

Regarding the timber a similar diversity exists. On the light, poor soil is generally found the jack or banksian pine, while on the heavier land the spruce and poplar are seen, provided in both cases the ubiquitous forest fire has not swept the country.

Our 'tie up' above Grand rapids was rendered more than sad by the death of a young Englishman on board named Herbert Bray. He was engaged as cook before leaving Athabaska landing, but a couple of days after starting he took seriously ill, and at 9.30 p.m., on June 20, expired. It was impossible to obtain any medical assistance, and any of the remedies obtainable seemed to do little good. He got worse and worse, suffering very much from vomiting till the end came. What was the trouble, or whether his life could have been saved under other circumstances, it is impossible to say. Perhaps it was a case of appendicitis, which does not always yield to medical treatment even in expert hands. We buried his remains the following day on the right bank of the river. I carved his name and date of death on a poplar tree nearby, and Mr. Steffansson made a lobstick of a spruce tree farther up the bank.

On Thursday, June 21, at 8.30 p.m., we left *The Midnight Sun* without regret, going in scows down the river to an island immediately at the head of the rapids. A tramway across this island for a distance of about a quarter of a mile is used for

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transporting the goods to a point below the roughest part of the rapids, where they are again loaded into scows and taken in this way to Fort McMurray, 87 miles down stream, over a portion of the river that is altogether too rough for a steamer of any kind. It was nearly midnight when we got our tents up on the bank beside an eddy below the rapids. I would estimate the descent of the river in these rapids to be about 50 feet. The banks here rise in terraces on each side of the river to a height of perhaps 300 or 400 feet. The country in the neighbourhood of these rapids has been burned over, and the land is rather too light for agricultural purposes.

The rock formation is sandstone, and along the banks for a considerable distance are found spherical stones in large quantities, some half imbedded in the rocky banks and others lying in great numbers along the beach. They vary in size from a couple of feet to eight or ten in diameter, and when seen partly imbedded in the bank they give the impression of having been fired into a wall by some giant mortar when the elements were at war with each other. Occasional specimens of petrified wood are found along the shore in the neighbourhood.

We remained in camp at the eddy from June 21 till the 25th, waiting till the men had got all the goods across the island and our scows and boats loaded, fourteen in all. The total number of persons making the journey, including boatmen and passengers, was 92.

About 9 p.m., on the 24th, a rumour spread through the camp that an Indian that day had killed a very large buck moose, and on the following morning eleven Indians belonging to the crew were away to bring the carcass to camp from where it had been shot many miles away; and just as we were dropping down about a mile to a lower eddy the Indians were seen coming out of the woods bearing the meat of the slain monarch of these forests. That night each of us had a taste of moose, each piece roasted on a stick before the fire, and it was really delicious. The weather continued very hot, 90 to 92 degrees in the shade, but a breeze along the river makes it endurable.

FROM GRAND RAPIDS TO FORT M'MURRAY, 87 MILES.

On Tuesday, June 26, we started in scows and large boats at 8 a.m. For some days previous the weather had been very dry and hot, but to-day it is somewhat cloudy and rain appears to be not far off. The water is still falling slightly.

The country about Grand rapids has been burned over, but as we descend the river about four miles the conditions in this respect change and there is a good covering of green timber, probably 20 or 30 years old.

We passed Burnt rapids at 8.30 p.m., and camped for the night two miles below, or some 28 miles from our start at Grand rapids.

The scenery along this day's journey has been fine, especially near the junction of Buffalo creek, which flows into the Athabaska from the north. The rocks along the high banks assume strange shapes, resembling great castles of the Italian style of architecture, but the timber here is small, very little being large enough for lumber.

Wednesday, June 27, we left camp at 7.20 a.m. It is still somewhat cloudy this morning, but very hot when the sun is not obscured. At noon we landed for lunch at the head of Boiler rapid, and started again at 1.30, and ran the rapid. A slight accident to one of the scows in this rapid delayed us till 7 p.m., when we started again, and very shortly after ran what is known as the Middle rapid. This we passed without any accident, and at 7.30 p.m. went ashore and camped for the night at the head of Long rapid. We are now probably 50 miles below Grand rapid, and 37 above Fort McMurray, where we will take a steamer again. The land along the banks to-day has not been as picturesque as it was yesterday. The land rises in terraces back from the river to a height of probably 400 feet.

The rock formation is still generally sandstone, but in certain places limestone is commencing to be seen. There is a good covering of soil, but rather too light for good crops.

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The timber is small and consists of poplar, birch and spruce, but about one half the area has been recently burned over.

The water is very low, and this causes us much delay, even with our boats and scows, which draw very little water.

Thursday, June 25, we started at 8.25 and were 20 minutes in running Long rapid. At 8.55 we went ashore, as one of the boats had been injured in running the rapid and was leaking, but it was soon repaired and we started again at 9.35. In 20 minutes more one of the scows struck a stone, causing her to leak so badly that her cargo, which was assigned to Fort Resolution, was injured considerably by the water.

Here Captain Shott, who had charge of a number of boats and scows with goods for the Roman Catholic Missions, overtook us and took the lead. We got started again at 3 p.m. and passed our rival fleet.

We reached Crooked rapid at 4 p.m. In this neighbourhood limestone appears along the banks in horizontal layers.

At 4.30 we jumped a small rapid without sustaining injury to any of the boats. Along here the layers of limestone present a very pretty appearance. In some cases there are caves running in to considerable distances along the bank near the water's edge.

At 5 p.m. we went ashore for the night on the right bank, about one-third of a mile above what is known as the Little cascade.

The forenoon of this day was clear and hot, but several showers passed by us in the afternoon, and finally one overtook us and we had an hour of heavy rain. The country has been partially burned over, and the standing timber is very small.

On Friday, June 29, it started to rain at 8.30 a.m., but before this we had run the Little cascade with the cook's scow and got our tent up just below the cascade, which consists of a semi-circular drop in the limestone rock of about two feet and extending completely across the river.

To give an idea of the delay caused by trying to navigate this portion of the Athabaska with loaded crafts, even with those of very light draught, I might mention that this morning Mr. Phillips, Inspector of Hulls and Boilers, caught up to us. He had left Athabaska landing in a canoe with one man, on Monday, June 25, thus making the journey in four days which has taken us twenty to accomplish.

The weather was showery, but the men worked all day, partially unloading the scows and carrying the goods a few rods below the cascade, where they were reloaded after they had jumped the cascade with part of the cargo. Captain Shott has again overtaken us, and this serves to cause delay, as there is only one place where the boats can be let down the rapids. The water, however, has risen about 4 inches, which is hailed with delight.

Saturday, June 29. About a mile and a half below the Little cascade is what is called the Lower cascade. It is very similar in character to the one farther up the river, but the perpendicular fall in the lower one is about twice as great or four feet in descent at the present stage of water. The boats had all to be partially unloaded and let down this rapid with lines and reloaded the same as before, but the men worked with a will, and by night all the boats were over and we camped a short distance below this cascade on the level limestone shore.

The lower cascade, though higher than the upper one, caused us less delay, as the portage at the latter was much shorter, being only about three rods, and the walking was good on the rocks. The upper or little cascade, however, in high water can be run without unloading.

The timber in the neighbourhood of the cascades is small and the country has been partially burned over.

Sunday, July 1, we left camp at 9.10 a.m. Having passed the rapids, no further difficulty was experienced, and we arrived at Fort McMurray at the junction of the Clearwater at 12.45 p.m., where we found the steamer *Grahame* awaiting us.

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The fall of the Athabaska between the head of the Grand rapids and Fort McMurray (87 miles according to the Hudson's Bay Company chart), is 360 feet, or something over 4 feet per mile.

Mention has been made of the bituminous or tar sands. They overlie the limestone and are found at different places along the Athabaska both above and below McMurray. They are also seen on the Slave river and through other sections of the Mackenzie River basin. Mr. R. G. McConnell, of the Geological Survey, made a valuable report on these tar sands in 1892, from which I have made the following quotations:—

“The tar sands hold in places lenticular beds of limestone, lignite seams 2 or 3 feet thick, and fragments of fossil wood. They vary in colour according to the quality of tar they contain, from a gray to a dark brown, and jet black. Where heavily saturated, streams of tar issue from the bank during the heat of summer, and form pools at the bases of the escarpments. This appears to be the origin as suggested by Bell of the tar springs which occur in the right bank opposite Tar island, two miles below the mouth of Red river as it enters the Athabaska, and in numerous other places.

* * * * *

“The tar sands occur along the Athabaska valley from Boiler rapid to a point about nine miles below the mouth of Calumet river, a distance of about 90 miles. West of the Athabaska they are soon concealed by the overlying divisions of the cretaceous, but are exposed for some miles along the valleys of the tributary streams. They were not found on Peace river. East of the Athabaska they occur in heavy sections on the Clearwater, Pembina and High-bank rivers, but on Muskeg and Firebag rivers the sections are small, and the greater part of the material in this district has evidently been planed away by glacial action.

* * * * *

“The tar sands, the principal bitumen-bearing formation of the district, are described in a preceding part of the report. This unique formation is of Dakota age, and constitutes in this region the basal member of the cretaceous series. It rests unconformably on the Devonian, and is exposed overlying the latter along the valley of the Athabaska for a distance of 90 miles. Lithologically it may be described as a soft sandstone, the cementing material of which is a bitumen or inspissated petroleum derived from the subjacent limestones. The boundaries of the tar sands were only precisely defined at a few points, but they were estimated to have a minimum distribution of fully 1,000 square miles, where either completely uncovered, or buried beneath a part of the overlying Clearwater shale on the highlands, and exposed in the river valleys. They vary in thickness where the section is complete, from 140 to 225 feet. The bitumen is unequally distributed through the sands, in a few places merely staining the grains, but in most of the sections examined it is present in sufficient quantity to render the whole mass more or less plastic. The following calculation, which is extracted from the summary report for 1890, although it can only be regarded as an approximation, yet will serve to give some idea of the enormous outpouring of bituminous substances which has taken place in this region.

“An analysis by Mr. Hoffmann of a specimen collected some years ago by Dr. Bell, gave by weight:—

Bitumen.	12.42
Water (mechanically mixed).	5.85
Siliceous sands.	81.73

“A cubic foot of the bituminous sand rock weighs, according to Mr. Hoffmann, 117.5 lbs. This figure multiplied by the percentage of bitumen 12.42 gives 14.59 lbs. as the amount of bitumen present in a cubic foot, or $14.59 \div 117.5 = 12.42\%$ per cent in bulk. Taking the thickness at 151 feet, and assuming the distribution as given above at 1,000 square miles, the bituminous sands in sight amount to 28.40 cubic miles.

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Of this mass, if the preceding analysis is taken as an average, although it is probably rather high, 22.9 per cent in bulk, or 6.50 cubic miles is bitumen. The amount of petroleum which must have issued from the underlying limestones to produce 6.50 cubic miles, or by weight approximately 4,700,000,000 tons of bitumen, cannot now be estimated, as the conditions of oxidation and the original composition of the oil is unknown. It must, however, have been many times greater than the present supply of bitumen."

"The commercial value of the tar sands themselves, as exposed at the surface, is at present uncertain, but the abundance of the material, and the high percentage of bitumen which it contains, makes it probable that it may, in the future, be profitably utilized for various purposes, when this region is reached by railways. Among the uses to which it is adapted, may be mentioned roofing, paving, insulating electric wires, and it might also be mixed with the lignite which occurs in the neighbourhood, and pressed into briquettes for fuel.

"The tar sands evidence an upwelling of petroleum to the surface unequalled elsewhere in the world, but the more volatile and valuable constituents of the oil have long since disappeared, and the rocks from which it issued are probably exhausted, as the flow has ceased. In the extension of the tar sands under cover the conditions are different, and it is here that oils of economic value should be sought. In ascending the Athabaska, the tar sands are overlaid at Boiler rapid by a cover of shales sufficient to prevent the oil from rising to the surface, and in ascending the river, this cover gradually thickens. The geological attitude of the shales is not the most favourable, as the beds dip away from the outcrop at the rate of 5 to 10 feet to the mile, and it is possible that a part, or even the whole of the oil may have flowed northwards and eastwards through the sands, and escaped where these come to the surface. It is unlikely, however, that all the oil has escaped in this manner, as small anticlinals in the covering beds are almost certain to exist, and a differential hardening of the beds themselves may serve to inclose reservoirs or inverted basins of large capacity. It is also possible that the sands at their outcrop, may by the deposition of tarry substances, be plugged tightly enough to prevent further egress. Favourable indications of the presence of oil in the vicinity of the Athabaska are also afforded by the existence of the natural gas springs referred to on a previous page.

"The question of the continuity of the tar sands and their petroliferous character under cover, can, however, only be settled in a decided manner by boring, and it is highly desirable that drilling operations should be undertaken for this purpose. At the mouth of Pelican river the tar sands are probably covered by about 700 feet of strata, and this amount increases as the river is ascended. At the Athabaska landing, if the formation extends to that point, it probably lies at a depth of from 1,200 to 1,500 feet below the surface, but the distance of the landing from the outcrop of the tar sands, and the variability in the thickness of the cretaceous formations make it impossible to give more than a rough estimate.

"Indications of the presence of oil in the district are not confined to the tar sands, as on Peace river and Lesser Slave lake inspissated bitumen was found in a number of places lining cracks in nodules, and at Tar island in Peace river, small quantities of tar are brought to the surface by a spring. Tar springs are also reported from several other points, but their existence lacks verification. North of this district tar occurs at intervals in the Devonian limestones exposed along the valleys of Slave river and the Mackenzie, all the way to the Arctic ocean."

Before reaching Fort McMurray, and at a distance of about 4 miles above Mountain rapid, on the right bank of the Athabaska there was observed what appeared the strongest deposit of asphalt yet seen, which emitted a very distinct odour.

Fort McMurray, though not a post of very great importance at present, has a history of considerable interest. It was here that the weary traveller of one hundred years ago from far away Montreal, metaphorically speaking threw down his pack

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and gave a sigh of relief after a journey by bark canoe through a wilderness for a distance of over 2,500 miles.

The names of the lakes and rivers traversed are alone sufficient to excite the imagination and to fully recall what such a journey meant. The Ottawa and Mattawa rivers, Lakes Huron and Superior, Rainy lake and Rainy river, Lake of the Woods, and its outlet, the Winnipeg river; Lake Winnipeg to Grand rapids; the Saskatchewan to Cumberland; thence by devious courses across unnamed portages and streams scarcely navigable even for the bark canoe to Pelican lake, to Churchill river, up that stream for many miles; across Buffalo lake and Lac La Loche, till at last the final portage has been made and Clearwater river is entered. He has now reached one of the streams that go to swell the volume of that greatest of Arctic rivers, the Mackenzie. In course of time other and more favourable routes were established, and only a very few of the oldest voyageurs are now left to tell the tale of such an adventurous journey.

FROM FORT M'MURRAY TO FORT SMITH ON THE SLAVE RIVER, 303 MILES.

We found the steamer *Grahame* to be a very comfortable boat. She is a stern-wheeled craft, with a flat bottom similar to those used on the Mississippi and other western rivers, and considerably larger than *The Midnight Sun*. We are assured that there are no serious obstructions to navigation in the course of her route, and that our difficulties will probably be few from here on to Smith's landing on the Slave river.

We lay at Fort McMurray from Sunday noon till Monday, July 2, at 7.30 p.m., when we resumed our journey down the Athabaska. The weather continued very hot. The river widens considerably after receiving the Clearwater, attaining a width of half a mile in many places. The banks become lower, islands clothed with timber are more frequent, and the scenery for many miles as we descend is devoid of the grandeur of the Upper Peace, but is nevertheless very pretty if not enchanting.

At 9.35 p.m. we tied up and took on wood, and did not start again till 4.45 a.m. on Tuesday, July 3.

The timber is larger below McMurray, some of the spruce being large enough for lumber, and there seem to be considerable quantities of it. Lignite and asphalt are seen along the banks between Fort McMurray and Fort McKay. We passed the last-named post at 7 a.m. It is situated on the left bank of the river, and consists of about a dozen whitewashed houses, the principal ones being a Hudson's Bay Company store and the Roman Catholic Mission.

The boat tied up for the night about 30 miles from Chippewyan. On account of the sand bars in the river near its entrance into Lake Athabaska it was thought best not to attempt this part of the journey till morning.

This has been another very hot day, 100 degrees in the shade. The water has risen 2 feet. It was very muddy till this afternoon, when we got ahead of the flood. Considerable driftwood is being brought down. During the day considerable spruce timber was passed, large enough for saw-logs. The land gradually lowers as we approach the lake. Where we tied up for the night only cottonwood and willow are seen.

On Wednesday, July 4, I rose early to see the entrance to Lake Athabaska, or 'Lake of the Hills,' as it was known in the early days, and as it is always referred to by Sir Alexander Mackenzie, whose explorations down these waters to the frozen sea, and afterwards up the Peace river and across the mountains to the Pacific ocean furnish the subject of one of the most interesting narratives of adventure ever written.

The morning was exceedingly hot, the sun at 3 a.m. resembling a ball of fire on the surface of the lake; and as the day advanced its rays pierced through the clear atmosphere with scorching effect. The ground falls gradually away, willows taking the place of the cottonwood trees, then great marshes, and lastly the lake itself spreading out far to the east; a great lake in a vast wilderness without a sail to enliven it

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or a sound to break the solitude. But as we round a point, about 6 or 8 miles to the north, we behold the whitewashed houses of Fort Chippewyan, built on high land, or rather red granite rock. Viewed from the lake, this post is rather imposing in appearance. The Hudson's Bay Company buildings, forming a quadrangle, show up well as we approach the shore. The Roman Catholic Mission buildings are large, but lose effect from their dull colour.

We lay at Chippewyan unloading freight till 7.45 p.m., when we started, and almost at once entered the main channel of Great Slave river. For the first 8 miles the channel winds in and out through drowned land covered with reeds and grass. It is one of the greatest resorts for wild geese and ducks to be found anywhere in the world. At 9.45 the steamer tied up for the night. This has been the hottest day yet. It registered over 100 degrees in the shade at Chippewyan, but the appearance to-night portends rain, and as we retire we hear rumblings of thunder and some lightning is seen. A little later the welcome rain is heard pattering on the decks. All will welcome a relief from what deserved to be called tropical weather.

Thursday, July 5. It rained most of the night, and in the morning the air was cool and refreshing. At a distance of some 20 miles from Chippewyan the land becomes higher and is covered with timber, and considerable quantities of good spruce are seen up to 15 inches in diameter and of good height. The other varieties are poplar, birch, tamarack and willow.

At about 25 miles below Chippewyan the Peace river joins the Slave, and at once the size of the latter increases from a half-mile to a stream a mile and a half in width. The Peace, and its extension the Slave, might well be called the Upper Mackenzie. The Peace itself is really an immense river. Far west, some 800 miles from its junction with the Slave and within the Rocky mountains, the Finlay and the Parsnip, themselves large rivers, join and form the Peace. The latter then flows easterly and northerly, bringing with it large quantities of drift timber, which is seen scattered along the shores and sand bars all the way to Great Slave lake. The size and quality of this timber, much of which is spruce, affords an idea of the forests along the shores of the stream all the way to the Rocky mountains. It is no exaggeration to say that there are several million feet of spruce drift-wood piled up along the shores which would make very fair lumber.

We reached Smith's landing about 10 p.m., having lost some three hours in taking on wood and also on account of wind. The Slave river from this point to Fort Smith, 16 miles farther down the river, is not navigable owing to rapids. Boats and scows partly loaded are sometimes sent down the rapids, but for the most part the goods are transported by wagons overland across this portage. The land along the Slave from the junction of the Peace to Smith's landing is generally level, and the soil along the river is a clay loam of fair quality. Vegetables are successfully grown when proper attention is given to their cultivation. There is said to be a district of prairie country some 40 miles wide and extending from Great Slave lake to the Peace river where the soil is good. Whether this information is reliable or not I am unable to say.

The journey across the portage was made in a wagon, and took about three hours. For the first 6 or 7 miles out from Smith's landing the soil is a clay loam. We then pass through a tamarack swamp for half a mile, and from there on to Fort Smith the land is a very light sand and worthless for agricultural purposes. The timber is jackpine, some of which is quite large enough for railway ties. The timber on the heavier soil consists of black and white poplar, spruce, birch and willow of small size and little value.

We were detained from July 5 to 11. During this time, part of which was spent at Smith's landing and part at Fort Smith, the men with teams were busy getting the goods across the portage. At Fort Smith the Slave river is upwards of a mile and a half wide.

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FROM FORT SMITH TO FORT M'PHERSON, 1,299 MILES.

At 3.15 p.m. Mountain or Pacific time, on July 11, we left Fort Smith on the steamer *Wrigley*, the *Grahame* returning to Fort McMurray. The *Wrigley* is a smaller boat than the *Grahame*, of a different model, and of the propeller type. She resembles one of the smaller steamers on our great lakes, being built on similar lines. She draws about 5½ feet of water when loaded.

The day is cloudy and quite cool. We are at last clear of all obstructions to navigation from Fort Smith all the way down to the delta of the Mackenzie. There is also very little darkness and the boat runs both day and night. We passed Salt river at 5.30 p.m., and Bell Rock a little after, and later also Gravel point, where we saw the last gravel to be met with in our journey north on these waters. The country is level, the banks rising at first to a height of 30 or 40 feet, but gradually getting lower as we descend the river.

Thursday, July 12. The boat ran all night, and at 8.30 a.m. we were opposite McConnell island. Below Fort Smith islands are more numerous and increase in size as we approach the mouth of the river. The land falls away till it becomes submerged, and at last by careful piloting we reach Great Slave lake at 2 p.m. Here we wait till the lake becomes calmer, then start for Fort Resolution some miles distant in a bay west of the mouth of the river. During our journey of the past two days the soil along the river was apparently a good, rich clay loam, but an indication of our approach to an Arctic climate was afforded by the appearance of frozen earth along the banks. As the earth thawed and was washed by the water, arches were formed extending under the surface of the ground and considerable distances from the shore. The outlet into the lake is obstructed by deposits of earth brought down the river. The pilots here have great difficulties, as the channel is annually changing, and we had the misfortune of being grounded just when it was thought we had reached deep water, which delayed us a few hours, but we got off without receiving any injury, and reached Fort Resolution at 10 p.m. This is a whitewashed village and, like many others of these posts, looked better at a distance than when within its limits. What added to the picturesque appearance of the place was the large number of Indian tents on the plateau between the water and the buildings. Mr. Conroy was here 'paying treaty,' as it is called, to the Indians of this part of the country, and as usual, this event had brought together the population of the whole surrounding country, including women and children and their dogs.

At Fort Resolution I saw several small gardens containing potatoes, beets, turnips, cabbages, peas, &c., so well advanced that by August 1 the potatoes should be fit for use.

Friday, July 13. The boat lay at Fort Resolution till 2.30 a.m. this morning. We have now reached a latitude where there is no darkness at this date; simply twilight for a short time. The run from Fort Resolution to Hay river, a distance of 70 miles, is all in the open lake and delays are frequently experienced, especially when the steamer has in tow scows heavily laden and incapable of weathering gales that frequently occur here. We were compelled to seek shelter in the lee of Burnt island, where we remained from 6 a.m. till 4 p.m., when the sea having abated we started again and reached the mouth of Hay river early on Saturday morning, July 14. At this place the Rev. Mr. Marsh, of the Anglican Church, has a mission and school that are being very successfully conducted under his supervision.

The land here, like most along the lake and Slave river, is of good quality, being a clay loam. A garden containing vegetables similar to those at Fort Resolution, though not quite so far advanced, was seen at this mission.

We left Hay river at 8.30 a.m. and had a calm sea and good run of some 40 miles to the entrance of the Mackenzie river, which we reached at 2.30 p.m. There is a bar at the entrance, but as the channel had been recently buoyed we had no great difficulty in getting through, though the steamer touched a rocky bottom once or twice.

The land is low at the entrance, and covered with spruce and tamarack of a small size.

Great Slave lake impresses one with its size, similar to that of our great eastern lakes. We were at one time entirely out of sight of land. For some distance from the mouth of Slave river the water of the lake is muddy, caused by the sediment carried down the river, but this large body of water acts as a great filtering basin, and the water soon becomes quite clear. The Mackenzie for some miles below the lake is very wide. In some cases the expansions deserve and receive the distinction of lakes. Islands covered with green timber are numerous and the appearance is suggestive of the lower St. Lawrence. We had some difficulty in following the channel at the mouth of one of these expansions, named Beaver lake, where we grounded twice on a soft bottom, which did no damage but caused several hours' delay.

On Sunday at 6 a.m., July 15, the blowing of the whistle announced that we were approaching Fort Providence, which is on the right bank of the Mackenzie, about 40 miles down from Great Slave lake, and 917 miles from Athabaska landing.

The village is very prettily situated. The Roman Catholic Mission at this point is an important one. The mission buildings, consisting of a church and convent, are quite imposing, and the garden is a surprise to the traveller in this far northern district. In it were seen peas fit for use, potatoes in flower, tomatoes, rhubarb, beets, cabbages, onions; in fact about the same as we would see a thousand miles further south. Besides the vegetables, were cultivated flowers and also fruit, such as red currants, gooseberries, strawberries, raspberries and saskatoons. But most surprising of all was, near by, a small field of wheat in the milk, the grain being fully formed. I was informed that it had been sown on May 20. I was anxious to know whether this grain had ripened, and was fortunate enough to learn later from one of the passengers who, returning by the *Wrigley*, had visited the same field on July 28, that he found it had been harvested before that date, probably in about two months after sowing. This seems almost incredible, but when we remember that during this whole period it had been subjected to almost constant sunlight and heat the reason for its rapid growth is obvious.

The banks of the river here are about 30 feet high. The land appears level and the soil is a rich deposit of clay loam, and this is the general character of the soil along the whole course of this great river.

Leaving Fort Providence at 10.40 a.m., we soon enter 'The Little Lake,' one of the numerous expansions of the Upper Mackenzie. At 10 p.m. we reached a point known as 'The End of the Line,' so named from being the place where the boatmen coming up the river could dispense with the tracking line. As the river widens above this point the current decreases so that boats and canoes can be propelled without outside assistance, while below here till the river widens again near its mouth, a distance of over 800 miles, the current is too swift for the general use of oar or paddle, and the line is necessary.

One notable characteristic of these northern rivers is that, though the rapids are not numerous, the current is generally so strong that it is only waste of time and energy to attempt to propel any craft against it, not driven by steam, without assistance from the shore. The Indians and half-breeds take very kindly to the work of tracking, but I question if any other people in the world would be willing to endure what this work necessitates. The winding shore has to be traversed where no work has ever been done worth speaking of to smooth the course. Rocky banks and clay cut banks have to be passed and tributary streams waded or swam; but the native trackman, without complaint and without profanity, seems to look upon such work as his to do, and fortunate it is that he is so persuaded.

On Monday, July 16, at 7 a.m., we arrived at Fort Simpson, in latitude $61^{\circ} 52' N.$, 161 miles below Fort Providence and 1,078 from Athabaska landing.

It is prettily situated on the left bank of the Mackenzie just below the mouth of the Liard. I was sorry to see that the clear Mackenzie had to be polluted with the muddy water brought down by the Liard. Evidently the latter has not the advantage of a filtering basin such as the waters of the Mackenzie have in Great Slave lake. The

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banks of the river at Fort Simpson are about 30 feet in height. The soil resembles that at Fort Providence and the vegetable gardens are similar to those seen there. The increased sunlight and heat as we proceed north counterbalance the disadvantages of the higher latitude. Fort Simpson has been regarded for many years as the most noted of the Hudson's Bay Company's posts in the north, and though it has, I believe, lost some of its importance, it is still a centre of trade for a wide district of country. It certainly can boast of one distinction which no other place of its latitude on this continent can. The Hudson's Bay Company have installed a system of electric lights for their buildings. There is also here a museum containing exhibits of the animals and birds of the country. In addition to the buildings of the company and those of its employees, there are several other houses, and besides these the Church of England mission building, consisting of a frame church and large dwelling nearby. The latter is used both for the residence of the clergyman in charge, and also for a school which he conducts.

The timber along the Mackenzie so far is smaller than that found along the Slave river, but nevertheless it is of sufficient size in some cases for lumber. There is a small saw-mill at Fort Simpson, not now running, at which lumber 12 inches in width was cut and used in buildings at this post. One cannot but be struck with the vast quantity of spruce along the route traversed, which is a little under size for lumber, but would make excellent pulpwood. The driftwood coming down the Liard is similar to that from the Peace, and indicates timber of a larger size farther up the stream than is found near its mouth.

On Tuesday morning, July 17, at 5.30, we left Fort Simpson and at 9 a.m. caught the first sight of the Rocky mountains (Nahanni Range), with their snow-capped peaks. It strikes the observer as extraordinary that the Mackenzie in selecting a course to the sea should have chosen a direction so far to the west as to necessitate its cutting its way through one chain of these mountains when a much shorter course lay open to the east where no such difficulties apparently exist. Probably all this is easily explained. The task at all events has been accomplished apparently without difficulty, and the traveller has reason to be thankful, for it affords him scenery so different from what he has seen for a thousand miles back that he can almost fancy he is again in British Columbia.

In the afternoon it rained and then turned decidedly cool, a great change from what we have had for some time. We arrived at Fort Wrigley, 136 miles from Simpson and 1,214 from Athabaska landing, at 9.20 p.m.

This is a new post on the left bank of the river 25 miles below the old post of the same name. The change was made owing to the locality of the latter proving very unhealthy.

The country about Wrigley is wooded. I noticed a spruce log cut near the post that was 20 inches in diameter.

The Nahanni flows from the west and joins the Mackenzie about halfway between Fort Simpson and Fort Wrigley. Just north of it rises Mount Camsell, a snow-clad peak of the Rockies, 5,000 feet high.

I am informed that there is considerable spruce up the Nahanni river, of sufficient size for lumber, though not so large as that which grows along the valley of the Liard. A man who had explored the latter stream assured me that he had never seen finer saw-log timber anywhere, except on the Coast, than along the valley of the Liard. He also said that good birch was found there, which is highly prized by the Indians for bark for their canoes.

Below Wrigley the river narrows to from a half to three-quarters of a mile in width. This continues for some distance and then widens out as we proceed down stream. Two noted mountain peaks, known as Mount Bompas and Mount Wrigley, are seen between Wrigley and Norman. About 20 miles above Fort Norman, and on the left side of the river the clay banks assume a very red appearance, and the people use the earth as a paint. This condition of the earth has been produced by fire in the

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coal seams. For several miles along the route the fire is now apparently extinct, but as we reach a point 8 miles above Fort Norman, for upwards of 2 miles along the right bank of the river smoke is distinctly observed from fires still burning far down in the seams of coal, or rather lignite.

It is worthy of note that Sir Alexander Mackenzie makes mention of these fires in his narrative as existing in 1789, when he explored and gave his name to the river, and the natives say it has been burning ever since and for an unknown period of time before.

About 60 miles below Wrigley we pass the mouth of Salt river, which flows from the east. It is so named from deposits of salt that exist some miles above the mouth. Rock salt is said to exist on the Great Bear river above Norman, but the greater part of that used at the posts is brought from the other Salt river, which has already been referred to as flowing into the Slave river from the west below Fort Smith.

At 7 p.m., July 18, we reached Fort Norman at the mouth of the Great Bear river, which is the outlet of Great Bear lake. Fort Norman is distant from Fort Wrigley 184 miles and 1,398 miles from Athabaska landing. Its situation is very picturesque. The mountain peaks stand up in bold relief out of a vast level plain. Bear mountain, on the north side of Great Bear river and east of the Mackenzie, is the most conspicuous.

It was 11.30 p.m. when we left Fort Norman, but there was no darkness, only a subdued light such as we have in more southern latitudes shortly after sunset. The steamer ran all night, and on rising on the morning of the 19th, we were over half way between our last port and Fort Good Hope. Between Norman and Good Hope we have mountains on both sides of the river, and as we approach the latter and at about 6 miles above the port we enter the 'Upper Ramparts of the Mackenzie.' The great river is here contracted for some 4 miles to a width of about a quarter of a mile. On each side rise perpendicular walls of limestone rock to a height of from 100 to 300 feet, which resemble huge fortifications. The river is here very deep, and a mile or two below the ramparts, where it takes a sharp turn to the left, Fort Good Hope appears in view like another Gibraltar, securely guarded, but where no foe ever approaches.

At 3.30 p.m. we reached Fort Good Hope, 174 miles below Fort Norman, 1,572 from Athabaska landing and only 26 south of the Arctic circle. Its situation on a level plateau is charming. The banks are about 30 feet high and the soil is similar to that all along the river, being a rich deposit very much resembling the soil of our great prairies. I saw potatoes in flower, cabbages, onions, beets, &c., in the gardens, and on an island nearby very good spruce timber, which is cut into lumber by whip-saws.

The steamer left Good Hope at 1 a.m., July 20, and when we arose in the morning we found we had passed the Arctic circle hours before. The banks of the river are getting lower, the river widens, and we are fast drifting down towards the Arctic sea.

Some time in the evening we stopped at Arctic Red River post at the mouth of a stream of the same name. It struck me as the least desirable place to live in of any in all this northland. A few houses, the church and the graveyard are all crowded on the side of a hill. Perpetual frost is only a foot below the surface and we no longer see that emblem of civilized life, the vegetable and flower garden, that has gone so far to make many of those lonely posts seem somewhat cheerful. We only stopped an hour or two at this post, and then started for our last and the most northerly post in the country, Fort McPherson.

About 1.30 a.m., July 21, I rose as we were rounding Point Separation, so named from the parting here of Sir John Franklin and Dr. Richardson when they separated for their perilous trip around the shores of the frozen ocean. The sun was just skirting the northern horizon, and I endeavoured to take a photo' of it, which I am afraid was a failure. Point Separation lies between the junction of the Mackenzie and Peel rivers. Below this point is the delta of the Mackenzie, which is many miles in width, with numerous islands between here and the sea, which is some 80 miles

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distant. At the point where Franklin and Richardson were camped are two spruce trees, which were marked as lobstersticks at the time of their separation and in commemoration of that event. Both are still standing, though one of them is dead. Judging from their appearance at a distance I would say that they are each about 16 inches in diameter and 70 feet in height, and this nearly 100 miles beyond the Arctic circle. I have been very much interested in the tenacity of life as shown in the growth of trees under the adverse conditions prevailing in this north country. Since crossing the Arctic circle we have seen no vegetables, but trees such as the spruce, birch, tamarack and willow are seen all the way, and as we round Point Separation and ascend Peel river, spruce lines the banks. It attains a size of 12 to 16 inches, and is used at Fort McPherson not only for their log buildings, but also is whip-sawed into lumber for general use.

After entering the Peel river the steamer stopped to take on wood, which delayed us a couple of hours, but very soon after starting we beheld on the high banks of the east side of the river the houses of Fort McPherson, with the white tents or tupics of the Esquimaux on the beach below. These Esquimaux had come over in their whale boats from Herschel island, in the Arctic sea, to meet the *Wrigley*. Their complexion is almost white, with a dash of ruddy colour that indicates good health. They seem very cheerful, are not at all diffident or stoical like many of our Indian tribes. On the contrary, they are very inquisitive, and disposed to make themselves almost too familiar. They are of fair stature, and do not show any of the marks of the struggle for existence that is observable in their neighbours, the Indians, in this part of the country.

At Fort McPherson, as at all the points visited for the last 1,300 miles of our journey, no news from the outside world had been received since the last winter mail in March. For over four months the news received was purely local, and generally consisted of reports from a few posts in the surrounding country, from hunting parties returning from their winter quarters, and from the whalers entrapped by the ice in the sea at Herschel island. We were the first to inform them of the eruption of Mount Vesuvius and the San Francisco earthquake, both of which had happened months before. Another message was one of sadness to all in this district. It was the death of Bishop Bompas, who was well known and evidently highly esteemed by all.

The *Wrigley* remained at McPherson, or Peel's River post, as it is generally called here, from Saturday morning till 2 a.m. on Monday, July 23, when she started back on her long journey of 1,300 miles, or, to be exact, 1,299, to Fort Smith, most of the passengers returning with her. The total distance from Fort McPherson to Athabaska landing by the route taken is set down as 1,854 miles, or 1,950 miles to Edmonton.

A few words regarding Fort McPherson may be of interest. It is, as before stated, the most northerly of the Hudson's Bay Company's posts. Its latitude is $67^{\circ} 25'$, and it is truly an Arctic village. The sun never sets for about six weeks in summer and is constantly below the horizon for the same time in winter. The thermometer went as low as 68 degrees below zero (Fahrenheit) last winter.

The inhabitants are in close touch with the Esquimaux of the Arctic sea and with the whaling ships that annually visit these waters. These whalers are mostly from San Francisco, coming up through Behring's strait in the summer, and returning again in the early fall. Last season most of them were entrapped by the ice that blocked the straits and were compelled to remain there for the winter. They went into winter quarters at Herschel island, where there is a detachment of the Royal Northwest Mounted Police. They were not sufficiently supplied with provisions for this emergency, and had to rely largely on what could be obtained in the country. They engaged the Indians of the mainland to supply them with meat from the chase, principally moose, with the result that the shipment of fur this year from the post at McPherson was very much smaller than usual.

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The report by the whalers of the ice conditions of the summer of 1905 is of interest to Arctic navigators. They say that the ice that drove into Behring's sea from the northeast and prevented their exit left that part of the ocean almost free of ice, a very unusual thing; and one of the captains is reported to have said that he was strongly tempted to set sail for the pole, as in his experience of twenty or twenty-five years he had never seen what seemed so good an opportunity of winning fame by such a venture. But he said his commission was to capture whales and not the pole. That these reports are correct is borne out by the fact that Captain Amundsen, who was exploring along the northeast coast, finding open water to the west set sail in that direction, and to his surprise soon found himself in the company of these whalers near the mouth of the Mackenzie. He was compelled to go into winter quarters, and laid up with them at Herschel island till this summer, when he succeeded in getting out through Behring's strait, being the first to make the entire northwest passage. During last winter he made an overland journey out to the Yukon and returned again to his ship, the *Gjoa*.

SPECIAL NOTES ON THE TIMBER OF THE MACKENZIE BASIN.

It may be well for me to add to the foregoing report a few observations dealing specially with the timber in the Mackenzie basin, and also a map with additional notes thereon.

Varieties.—As we go north, the varieties of trees greatly decrease in number and in the sub-Arctic forest belt they are reduced to eight species, namely, white spruce (*picea alba*), black spruce (*picea nigra*), larch or tamarack (*larix Americana*), jack or Banksian pine (*pinus banksiana*), Canada balsam (*abies balsamea*), aspen or white poplar (*populus tremuloides*), balsam poplar or balm of Gilead (*populus balsamea*), and canoe birch (*betula papyrifera*).

The first five of these belong to the coniferous family, while the last three, namely, the aspen, the balsam poplar and the canoe birch, are of the broad leafed variety.

In addition to these are various species of willow, extending throughout the whole region, but they are too small in size to be classed as trees.

The larch or tamarack continues pretty well north to prefer the swampy land, but as we approach the Arctic regions it attains its best growth on higher ground.

The black spruce also follows the example of the tamarack in this respect, while the white spruce thrives best on the higher and dryer land throughout the whole of the subarctic watershed. The tamarack vies with the white spruce in enduring the Arctic climate and is found almost to the limit of tree growth.

The wood of the tamarack is harder and better than the spruce for purposes where strength and durability are required. It is also the best, perhaps excepting the birch, of these northern species for fuel. Though widely distributed it is only found in limited quantities here and there in scattered patches, whereas the spruces of different varieties are found in almost every part of Canada from the Atlantic to the Pacific and from the southern boundary of the Dominion to the tundra and frozen land beyond the Arctic circle.

It would undoubtedly be misleading, with our limited knowledge of the greater part of the country, to attempt to define the areas that may, with the settlement of the country, offer profitable fields to the lumbermen. It is true that there has been for many years a good deal of travel through the country, but the routes taken are mostly confined to the great water courses. While in the country I made diligent inquiries from those I met who are engaged by the companies and who take the place of the old *coureurs du bois* of the early days in 'tripping' in winter, visiting the hunting lodges of the Indians to get furs. Occasionally some of the information obtained seemed valuable, but even these routes or dog trails, are always chosen where there is

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the least timber to obstruct the course, generally along the lakes and rivers or through level and sparsely timbered muskegs. The Indians, being interested in the fish and game of the country, can give reliable information concerning them, but it would be unwise to make any calculations from what information can be gained from them regarding either the quantity or quality of timber in the country.

I am more than ever impressed with the view that I have long held, that no more judicious expenditure of public funds can be made than what would be involved in a regular system of exploration of our unoccupied lands.

So far as our present knowledge affords us a means of judging, the whole of the Arctic basin, except the barren lands of the far north and certain limited areas in the watersheds of the Athabaska and Peace rivers, which latter are prairie, may be correctly described as forest lands.

It must not be inferred that the whole of this vast area is timbered in the same sense that Ontario and Quebec were in their primeval state. The timber is not as large, and by no means as evenly distributed. Very frequently after proceeding a mile or less from one of the large rivers we will enter a muskeg with only a few small scattered spruce and tamarack here and there dotting the landscape. This will probably continue till we approach a small stream draining the muskeg, and as we pass down such a stream we will frequently find very good spruce, poplar and birch along the banks and extending for varying distances to the right and left.

From the information at hand I think it quite safe to assert that the largest extent of timber in the Mackenzie basin, as well as the largest in size, is to be found along the tributaries of the Mackenzie which flow from the west, such as the Athabaska, the Peace, the Liard, the Nahanni and others. It must be remembered that these are themselves great rivers with many tributary streams, and the aggregate quantity of spruce, which is the principal timber tree in that region, must be very large; while trees of the same variety large enough for pulpwood are found in great quantities throughout the whole of the Mackenzie waters and extending all the way down to the delta of that river.

The spruces of this region are of two varieties, namely, the white and black spruce; the former is the larger and more valuable. Both varieties when accessible are now becoming very valuable, as they furnish the best material for the manufacture of pulp, and this district contains a world's supply of such timber of a sufficient size for that purpose. At present there is no outlet for this supply, but if a railway were built between Athabaska lake and Fort Churchill it would open a pulp district extending from tide water to the Rocky mountains.

FROM FORT M'PHERSON TO FORT YUKON, PROBABLY 500 MILES.

Following out my intention of 'coming out' by a different way, I allowed the Wrigley to leave on her return trip without me. The only other practicable summer route is by way of the Porcupine and Yukon rivers, and this was the one chosen. It would be a very good route indeed were it not for the part from Fort McPherson to the Bell river, a tributary of the Porcupine. This can be made either by following up the Rat river from its junction with the Peel to near its source in the mountains, and then making a portage of a few miles into one of the small branches of the Bell, or by going overland across the mountains by a portage of 82 miles to Bell river near La Pierre House. I had intended going by the former and had chosen a good Peterboro canoe for the purpose, but as the Indians from near Rampart House had come over the portage and were returning that way and would assist me as far as Rampart House, I decided to go with them. They reported that owing to the dry weather Rat river was almost impassable, but that the portage was on that account better than usual.

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With the kind assistance of Mr. John Firth, the Hudson's Bay Company's agent at McPherson, I was able to make a bargain with the Indians to pack my outfit over this 82-mile portage and to take me from there on down to Rampart House; and on the afternoon of Tuesday, July 24, we crossed the Peel river and started up the trail. Part of our outfit was carried by the Indians and part by their dogs. A good dog will pack thirty or forty pounds quite easily.

For a distance of a few miles from the Peel the country is partially wooded with spruce, birch, balsam-poplar and willow; but after this the route is through an Arctic swamp, and the only timber is that found skirting the shores of the small streams on the way. The trail takes a westerly course through a pass in the mountains which seems as well chosen as possible. There is no mountain climbing, but until we are perhaps two-thirds of the way over there is a constant gradual ascent which is very wearying to the traveller, especially if he has a load to carry. Though the hot summer had made the trail dryer than usual there was nevertheless a great deal of wading and trying to walk on the hummocks or *têtes des femmes*, which latter is a rather unsatisfactory exercise in gymnastics. There need, however, be no fear of getting mired in any of these bogs, for at about 8 or 10 inches beneath the moss we reach perpetual ice or frozen earth.

It was a little after 5 p.m. when we started on the trail, and when we had gone about 7 miles it commenced to rain, and we camped for the night.

The next day, July 25, it took us some time getting our things dried, and we did not start till 11 a.m. We travelled till 8.30 p.m., when we camped on the bank of a stream about 25 miles from Peel river. The trail is in the valley of Lapierre or Stony creek, which flows easterly to Peel river, and is south of the trail. We forded one small tributary of this creek about 3 miles east of the one where we camped. A narrow fringe of spruce, balsam-poplar, willow and canoe birch is seen along Stony creek.

The stream at our camp was about 2 rods wide and 15 inches deep at that time, but evidently it is one of considerable importance at other seasons of the year.

On July 26 we started at 9 a.m. and travelled till 7 p.m., making about 18 miles, and crossing another small stream in the afternoon. Our course lay westerly up the same valley with Stony creek still far below us to the left. The day was quite cool and the night decidedly so. We are now well up the mountains and snow is seen in the ravines.

We left camp at 8.30 a.m. on Friday, July 27, and at 1 p.m. we reached the Great Divide, which in the pass is 2,630 feet above the sea. The mountains on each side, which are of sandstone, are from two to three thousand feet above the pass.

Shortly after passing the Divide we crossed a small stream which flows into one farther south similar to Stony creek, but of course flowing west. Our course was down the valley of this stream and to the north of it. Another cool day and no mosquitos. We passed over some snow along the sides of the hills, but without the least difficulty, as it was almost as hard as ice. After passing the summit, though the descent is scarcely perceptible to the eye, the difference is soon felt by the traveller, the walking being much less fatiguing. After making some 18 or 20 miles we camped again beside a stream.

On Saturday, July 28, we started at 8 a.m., and at once forded the stream by which we had camped and in the valley of which we had been travelling since crossing the Divide. It was of considerable size, but at this season was easily forded. Four miles farther on we crossed this stream again.

The weather is still cool and there are no mosquitos. The mountain scenery here is beautiful. Though the peaks are not so high as in the Rockies farther south, they probably reach 5,000 feet above sea level. No large glaciers are seen, but considerable snow remains the year round on some of the peaks. At noon to-day a high mountain lies directly in front of us, with valleys to the north and south of it.

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We travelled on, following the trail as it bore off to the north, and finally came to the same stream again, which we crossed for the last time, now flowing to the north. The current was very rapid. The water was about 18 inches deep and the fording the most difficult we experienced anywhere on the trail. We camped immediately after making the crossing.

On the following morning we passed through a very bad swamp and then down the side of a long, steep hill partially wooded, and at 11 a.m. reached the Bell river at the end of the portage.

On our journey across we found growing in the swamps a large quantity of berries of the variety *rubus chaememorus*, which the Indians called nuckles. They grow on a very low bush in the moss and are about the size of a large raspberry. They are granulated, the grains often numbering twenty or more on a single berry. They are of a white colour until ripe, when they become a light yellow. The Indians seem very fond of them. We also saw several patches of blueberries, which were beginning to get ripe at this time.

It was pleasant to see the calm waters of the Bell in front of us and to realize that by our journey of four and a half days we had reached the waters flowing to the Pacific ocean.

The bark canoes left by the Indians on their way east were found, and we were soon making 4 or 5 miles an hour down this fast flowing stream. I had been assured that one of the canoes was large and quite capable of carrying two men and a lot of 'dunnage,' but it was about the smallest of its species for such a load I had ever seen, and from the start all the way to Rampart House, a distance of over 200 miles, my time was fully employed in sitting perfectly still. I had expected to have a seat in the bow, and the pleasure of paddling, but these crafts are not 'built that way.' They are long, but very narrow, so narrow in fact that the only place wide enough for a seat is in the centre, and I was compelled to sit very close behind the captain of the craft, and too near to use a paddle without interfering with his, which at every three or four strokes he changed from one side of the canoe to the other in order to keep it in its proper course.

The afternoon was cloudy, with some rain, but the Indians were anxious to get home and we kept on till 10 p.m., probably making 25 or 30 miles from where we started with the canoes.

The Indians killed three young wild geese, which made us an excellent supper.

On Monday, July 30, rain delayed our starting till 9 a.m., and at 10.20 we were at the mouth of Bell river and entering the Porcupine. The Bell, from where we entered it to its junction with the Porcupine, is about 20 rods wide and without any rapids or other obstruction to navigation. The current, however, is strong, similar to that in most of these northern rivers.

A fringe of timber, mostly small spruce, lines the banks, but apparently does not extend far back.

The Porcupine at the mouth of the Bell is about 60 rods wide and the current somewhat stronger than in the Bell.

The day was cool and cloudy, with occasional light showers, but the Indians cared not for these and paddled very hard all day and till 9.30 p.m., when we reached the mouth of the Driftwood river, probably over 50 miles from our start in the morning. The land along the route so far has been clay, sand and gravel, but no matter what its quality the climate forbids successful agriculture. At less than a foot below the surface the ground is frozen even through the hottest summer months.

On Tuesday, July 31, we left camp at 7 a.m. and made a long journey of upwards of 50 miles to Old Crow river, arriving there at 7 p.m., and killing eight or ten geese on the way. A raw wind with showers made travelling very uncomfortable the whole day, but the Indians had set their hearts on reaching their home that night, and nothing would stop them.

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Both the Bell and Porcupine are very crooked, so much so that the distance following the windings of these streams is probably three times as great as it would be in a straight line, and while the wind assisted us on certain stretches this was more than counterbalanced by the delay it caused us on others, and besides I was in constant fear that our frail craft would be swamped.

The cut banks of the Porcupine, when seen at a distance, especially through a haze or fog, take on the most fantastic shapes, frequently resembling great buildings of all styles of architecture, and it is impossible for me to describe an illusion of this kind that met our view as we approached the Indian encampment at the mouth of the Old Crow. It was a cloudy, hazy evening with almost a gale of wind from the north, and as we rounded a point leading up to the encampment a great city appeared a few miles away, with wharfs and vessels in front and buildings of various kinds extending far back from the shore. There was a fine church, with its spire so real in appearance as almost to persuade me that my Indians had been too modest in not informing me of their great advance in architecture. This illusion was kept up for fully half an hour, though varying somewhat in appearance. I watched the panorama till finally through the haze one portion of the bank after another gave up its fancied appearance and resumed its true character, when, instead of the castellated city which I had pictured as the home of these Indians, we saw only about forty half-starved creatures all out on the high bank to welcome us, while behind among the trees were a dozen dilapidated tents, the whole surroundings indicating want and starvation, sickness and a struggle for existence, known only to those who are condemned to live in this Arctic land, and whose very existence is dependent on the exigencies of the chase.

I was assured before leaving McPherson that it would only be necessary to take sufficient supplies to last my Indians and myself as far as Rampart House, and on reaching Old Crow they were nearly exhausted, so I was in poor condition to meet a whole band of hungry beings who always expect a feast when a white man visits them. The only thing I could do was to promise that I would send a present back to them from Rampart House. They had no flour, and my intention was to get some for them there, but this I was unable to do. The supplies had not yet arrived, and there was no flour to be had, so I sent them some tobacco and tea, which are both considered prime necessities; next come meat and fish, and then flour. An Indian camp is always said to be in a starving condition if it has no tea or tobacco.

I might observe here that once we cross the mountains and enter the waters flowing into the Pacific, one of the principal topics of conversation is the salmon. If it were not for the salmon, the moose and the cariboo, existence in these regions would be impossible.

It was long after midnight before the people of the village (if such a term is applicable) retired to rest; there was so much to talk about and so many anxious listeners to the tales that the travellers had to tell. There was the death of Bishop Bompas, at Caribou crossing, conveyed by a letter from the Venerable Archdeacon Macdonald, of Winnipeg; the death of Mrs. Christie, of Fort Simpson; the San Francisco earthquake; with all the local news from McPherson and the surrounding country.

The weather cleared up during the night, and on Wednesday, August 1, the view when I rose was really charming. Our camp was on a point on the river some 40 feet high, and below the calm waters glistened in the sunlight like a sea of glass. What a change from last night, when these same waters, angered by the north wind, threatened our little canoes and caused me an hour of downright fear such as I had never before experienced. For miles and miles the river could be traced winding through the valley land, while away beyond, the mountains were seen with their snow-clad peaks, one beyond the other as far as the eye could reach.

We left Old Crow at 10.30 a.m. Our party, which hitherto had consisted of three Indians with three canoes, was now reduced to two, one of the Indians with his canoe remaining at their camp. After the most pleasant day yet experienced on the journey,

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we camped for the night on the bank above Blue Fish river, which flows into the Porcupine from the south. The Porcupine is here about 60 rods wide, and the water is somewhat clearer than further up the stream. The banks are some 30 or 40 feet high, with very little timber of any value to be seen.

On Thursday, August 2, another lovely summer day, we left camp at 8.45 a.m.

In a few hours the river narrowed to less than half its usual width. The current increased, carrying us along almost at steamboat speed, but without any broken or turbulent water to cause uneasiness. We were in the upper ramparts of the Porcupine. Though not to be compared in grandeur with those of the Mackenzie, they nevertheless possess characteristics that are entirely unique. The stream winds around between sandstone banks, and at every turn as we descend new scenes open up to view that are very tempting to the photographer. At noon we saw a tent on the beach occupied by a white man, the first we had seen since leaving McPherson. Shortly after this we reached Rampart House, which is just east of the Alaska boundary line. It was formerly a post of the Hudson's Bay Company, but is now occupied by Mr. D. Cadzow, an independent trader. I here dismissed my Indians, and engaged a man with a boat of comfortable size to take me down to Fort Yukon, at the mouth of the Porcupine, 225 miles distant.

GENERAL REMARKS.

As we are now passing out of Canadian territory, a few general remarks regarding the resources of the district passed over, and of the condition of the Indians and others who make their home there, may be appropriate.

I have already made frequent mention of the soil and its capabilities, and also of the timber so far as could be ascertained from a somewhat hasty journey through the country, and I shall not have much further to say here on these subjects. I have also touched on the evidences of certain minerals, such as coal, petroleum and salt. But we are dealing with a vast and almost entirely unexplored wilderness, and it is scarcely probable that it is without much undiscovered mineral wealth. Such products are not confined to southern latitudes, as the riches of the Yukon and Alaska go to prove. The fish in these cool northern waters, as might be expected, are for the most part of excellent quality. They are found in abundance in all the northern lakes and rivers, the whitefish (*coregonus*) being the most widely distributed. The pike (*lucius*) is also pretty generally distributed. The fresh-water ling (*lota*) and the Arctic trout, sometimes called Back's trout, are all found in many of the northern lakes and rivers. The inconnu (*stenodus*) is peculiar to the Mackenzie river. It was named 'inconnu' (unknown) by Sir Alexander Mackenzie's exploring party, as it was to them an unknown fish. It is a good fish, and the largest of any of the species found in the Arctic watershed.

As before stated, the salmon is the great fish of the Pacific waters, and of it there are a great number of species. Among them are the king salmon, in Alaska and the Yukon; the spring salmon and the sock-eye or blue back, called also the red fish of British Columbia. The last-named is the most valuable for canning purposes, on account of its flavour and for the deep red colour of the flesh. Another species, called the coho or silver sides, is of less importance than the sock-eye, on account of the colour. It is generally frozen. The dog salmon reaches a considerable size. It is chiefly salted for the Japanese market. The hump back is seldom over five or six pounds in weight. It is chiefly used by the Indians. One of the very best fish found on the Pacific coast is the steel head. It is large, weighing from twenty to forty pounds. It is unlike in appearance any of the other salmon of the west, and exactly resembles the salmon of eastern Canada and Europe. It is very good for cooking, and is pronounced one of the most delicious of fish.

One of the resources to which I have not yet referred is the wild animals that find a home in the wilderness. Among them are the moose, the caribou, the bear, the wood

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buffalo and the musk ox, and a large number of the fur-bearing animals, such as the beaver, marten, fox, mink and many others. It is unnecessary to say that had it not been for these furs it is probable that this sub-Arctic region would never have been visited except by a few adventurous explorers and missionaries. Attracted, however, by the value of the furs, the Northwest Company and the Hudson's Bay Company were early in the field, and to-day, in addition to the latter, there are a large number of independent traders whose agents traverse practically the whole country, and if records of their journeys could be collected, very interesting information of great value would be obtained. There is a virgin field here for any adventurous author who wishes to gather details at first hand.

But I must confine myself to the purpose of this report, and I desire to say that if for nothing else, this region may for all time be of great value to the Dominion for the furs it produces. There seems to me no reason why the productiveness of this country in this respect may not be vastly increased by proper methods. This may not be practicable yet, but in the future, with the constantly increasing value of furs, it will certainly be found profitable to maintain preserves where the game and fur-bearing animals will be protected and the returns greatly increased by prudent management.

Interesting as are the natural characteristics of the country and its undeveloped resources, the inhabitants who make their home there are at least worthy of some attention. In the region traversed between Edmonton and Fort Yukon we meet with several tribes of Indians, speaking as many different tongues. The first of these as we go north are the Crees, the Knistineaux of Mackenzie. Then as we reach Athabaska lake we have the Chippewyans; next the Slaves, and lastly the Loucheux. The Cree, the Chippewyan and the Slaves, though differing much in speech, resemble each other in character and appearance; but when we come to the Loucheux we seem to have reached a different type and one more closely allied to the eastern Asiatic than to the American Indian. They inhabit the country of the lower Mackenzie down to the sea and west along the Porcupine and lower Yukon. They are rather short of stature and dark in colour, are very inquisitive and seem much disposed to imitate the white man. They are very devout in their religious observances, most of them being members of either the Anglican or Roman Catholic church.

Any narrative of travel would be most incomplete that did not make reference to the missions of these two churches in the far north. At Chippewyan, Providence and Good Hope, the Roman Catholics have fine buildings and large schools, as well as at other points, while the English Church has established itself at most of the posts. They also have schools at Fort Simpson, at Hay river, and I believe also at several of their other missions.

The Indians, the half-breed, the white trader and his employees, and the missionaries constitute the very scattered population of that vast region between the borders of civilization on the south and the Arctic sea on the north. To endure the rigorous climate, the isolation from civilized life, with starvation constantly to be feared, and the many deprivations incidental to the wilderness, one would think should have its compensations somewhere, but it must be said that they are not apparent to the ordinary observer. Such a life undoubtedly has some enjoyment for the young, active and vigorous, but for the afflicted and the aged the case is very sad. At very many of the points visited we were implored for advice and for medicine by the sick. Many having chronic diseases which simple surgical treatment would cure, are compelled to live out a shortened existence, for no physician except by merest chance ever visits them. The Department of Indian Affairs has physicians who attend to the medical wants to those Indians that are under treaty, but throughout the whole valley of the Mackenzie river, from Great Slave lake to the sea, nearly a thousand miles, being outside of treaty limits, there is no physician to be had. Surely the people of this country would endorse any action that the government might take to induce a few medical men to reside in those far outlying districts and afford medical relief where it is so much required.

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The watershed of the Mackenzie is computed to contain 451,400 square miles of territory. Within it are the Athabaska, the Peace and the Liard, all great rivers, besides the Mackenzie itself; also the Athabaska and Great Slave lakes, and many other smaller lakes and rivers. They afford a great system of inland navigation, with comparatively little obstruction. To decide on an outlet to the Atlantic for the products of this large territory will be a problem for the future. The distance between Fond du Lac at the east end of Lake Athabaska, and Fort Churchill on Hudson bay, is less than 500 miles, and if these points were connected by a railway an outlet would be afforded vastly shorter than that via the St. Lawrence, and to a district of country greater in area than the whole watershed of that stream from Montreal west, including the great lakes of that basin.

CONTINUATION OF ROUTE OF EXPLORATION.

Having rested two days at Rampart House, we started down stream at noon on August 4, and immediately crossed the 141st meridian and entered Alaska. We will now be under the flag of the United States for some distance. About 5 p.m., at a distance of some 27 miles, we passed the site of Old Rampart House, and about 10 miles further down saw a tent on the beach, which proved to belong to a party of the United States Geological Survey in charge of Mr. Kindle. We camped here over night and left next morning at 9 a.m., August 5. We soon left the Upper Ramparts, which we have had for 40 or 50 miles, and having a strong current with us, made about 40 miles, camping earlier than usual owing to rain.

The next morning, August 6, we left camp at 7 a.m. and soon entered the Lower Ramparts, which are very beautiful, but they only extend about 5 miles. After this the country becomes level, the banks are lower and the river widens considerably. The timber, principally spruce, improves, resembling for size that of the Peel river. This was a fine day, and we made about 60 miles, camping at 11 p.m.

On Tuesday, August 7, we left camp at 6 a.m. It was a windy day, which somewhat retarded our speed. The country becomes flat and the banks low as we approach the Yukon river, which we reached at 10 p.m.

Fort Yukon is situated on the right bank of the Yukon river, about 2 miles above the mouth of the Porcupine. It will have been noticed that our whole course from Athabaska river to the delta of the Mackenzie, as well as that on the Bell and Porcupine rivers, was with the current, but in these 2 miles on the Yukon we had to work our boat against the stream, and this afforded a good idea of the difference in going up and down these rivers. It took us fully an hour and a half of very hard pulling and some tracking to make this distance.

I reached Fort Yukon about midnight, just two weeks after leaving Fort McPherson, and glad that we had again reached a point where steam navigation will make the journey homeward less arduous.

A further reference to the Ramparts of the Porcupine may be permissible. They are very picturesque, often rising perpendicularly or nearly so to heights varying from 40 to 200 feet. Frequently they appear like great stone fortifications. The river often narrows to from 500 to 800 feet, in some cases much less; and with frequent abrupt changes in the direction of the river, they appear, when looking ahead, to completely block the stream, and with the sunlight glistening on the rocks they resemble when seen from a distance, buildings of all sizes and shapes. Very frequently these are so grouped as to give the appearance of stone cities, similar to those seen in eastern lands.

The Upper Ramparts begin about 10 or 12 miles above the Alaska boundary, and extend down stream some 40 or 50 miles. The rock formation as we descend is for the first 25 miles a hard sandstone and quartzite; then changes to basalt for some distance, and below this limestone and shale penetrate upwards through the basalt.

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The Lower Ramparts begin some 20 or 25 miles below the end of the Upper Ramparts. Their formation is principally magnesian limestone and shales, the limestone being the predominant rock.

The formation between the Upper and Lower Ramparts is clay, sand and gravel.

FROM FORT YUKON TO DAWSON CITY, ABOUT 385 MILES.

At Fort Yukon I had to wait from Tuesday night till the following Sunday evening for a steamer going up the river to Dawson. It was a 'deserted village' at that time, most of the Indians, who at certain seasons of the year inhabit the small log huts of a primitive style of architecture, being away. Before the Alaska boundary was defined the Hudson's Bay Company occupied Fort Yukon as one of their posts. There are now two white traders there, who do considerable business at certain seasons of the year.

I had been so rushed along for the past month that I had little time to reflect on anything but what was passing before my eyes. Within the last four short weeks I had travelled 1,300 miles down the Mackenzie, 82 across the mountains, and something in the neighbourhood of 450 at least in a canoe and row boat down the Bell and Porcupine rivers to this point. I have already stated that Fort Yukon is a few miles north of the Arctic circle. Its longitude is also a little over 145° west of Greenwich, and the local time here is about $4\frac{1}{2}$ hours slower than in Ottawa. Perhaps many who are tolerably familiar with the geography of Canada would be surprised to learn that even Fort McPherson is much further west than any part of Vancouver island, while Fort Yukon is 10° further west still. In our journey north we changed time twice, and when I reached Fort McPherson the local time was one hour slower than that used in any other part of Canada. The reason is apparent. Our general course had been west of north, and as we ascend towards the pole, the convergence of the meridians so increases that a degree of longitude is soon passed over.

The Yukon river, for some 75 miles below Fort Yukon, and nearly as far above, is many miles in width, forming what is known as the Yukon flats. This portion of the river is filled with islands, and it would be unwise for anyone unacquainted with the proper courses to attempt to go up it without a guide, as he would be almost certain to get into wrong channels. Evidently these flats have once formed a large inland lake.

Fort Yukon is just a few miles beyond the Arctic circle, and notwithstanding this, I saw in a garden there at the time of my visit vegetables well advanced, peas fit for use, potatoes, lettuce, beans, beets, &c.

The Yukon is a swift flowing stream, the current probably averaging, between Fort Yukon and Dawson, 4 miles an hour. The distance is, I believe, 385 miles, but the machinery of our steamer, the *Lavelle Young*, was partially disabled, and it took us from Sunday evening till Friday afternoon, August 17, before we reached Dawson.

We crossed the international boundary on August 17, and again entered Canadian territory, which I had left at Rampart House twelve days before. At 5 p.m. we arrived at Dawson City, the most important town on the river or in this part of the continent.

I was five days at Dawson waiting for a boat to Whitehorse. During this time I had an opportunity of visiting the mines in the vicinity. It is beyond my field to make any report on the present condition of mining there. This will be competently done by members of the Geological Survey who have spent the past summer in that district. I may say, however, that the work seems now to be in a transition stage. The day for the hand miner with his rocker is over, and hydraulic mining and dredging (more particularly the latter) are being profitably engaged in.

What struck me very forcibly was the way in which the timber had been completely stripped from the hills, the larger for building purposes, for mining props and

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for fuel, and the brush for building embankments to hold the tailings. Spruce wood was selling for \$13 per cord at the time of my visit.

DAWSON CITY TO SKAGWAY, 571 MILES.

The journey from Dawson City to Whitehorse, some 460 miles, was comfortably made in a well-equipped steamer, the *Dawson*. She left on Wednesday evening, August 22, and arrived at Whitehorse on Sunday afternoon, August 26, and on the following morning at 9.30 we took the train for Skagway, arriving there at 4.30 p.m.,

This road, which is 111 miles in length, is narrow gauge, but the road-bed is good and the cars comfortable. Along the route as far as the south end of Lake Bennett there is nothing specially worthy of note. The soil is generally sandy. Jackpine and spruce of little value for lumber are seen along the track. After leaving Bennett, the road winds up the mountain to the summit of the pass, which is 2,897 feet above the sea. Here we pass again into United States territory. The road descends 21 miles with a very steep grade to Skagway, at tidewater on an arm of the Lynn canal. The trip between Bennett and Skagway affords some exceedingly fine mountain scenery. In many places we pass near the snow line, and from Skagway a large glacier is visible. The country is almost entirely devoid of timber. The rocks are granite, and in no part have I seen a more desolate landscape.

FROM SKAGWAY TO VANCOUVER, 867 MILES.

The fine Canadian Pacific Railway steamer *Princess May* was waiting at the dock at Skagway when we arrived, and at 8 p.m. on Monday, August 27, we started for Vancouver. I was sorry that the trip down the Lynn canal was made at night, and a very dark one at that, which prevented our having a view of the glaciers that otherwise would have been visible. Tuesday was a dull, rainy day and without anything of interest to record. The steamer called at Port Simpson early on Wednesday morning, and passed Kaien island, the site of the future city of Prince Rupert, in the forenoon, but did not stop. A little later we called at Port Essington, but the tide was out and our steamer was unable to reach the dock. Further on we called at Caxton, where there is a very large cannery and where we took on a quantity of canned salmon. On Thursday at 6 a.m. we called at Bella Bella, and at 3 p.m. at Alert bay on Vancouver island, to see the totem poles of the Indian village there. Nearly the whole sail from Skagway is so sheltered with islands that one can fancy he is sailing down a river.

On waking on Friday morning, August 31, I found we were approaching the City of Vancouver. It was a delightful morning, and at 7.30 our steamer tied up at the wharf, and my round trip may be said to end here. The distance travelled from Edmonton to Vancouver was about 4,250 miles, and occupied a few days less than three months. It has been to me a trip of very great interest, and I trust the little information gained, and which I have endeavoured to convey in this report, may be of some public service.

I have the honour to be, sir,

Your obedient servant,

E. STEWART,

Superintendent of Forestry.



